

Tho: Brooke
T H E *H Brooke*
PROBLEMES
OF ARISTOTLE,
with other Philosophers *K*
and Phisitions.

*Wherein are contained diuers
questions, with their answers, tou-
ching the estate of mans
bodie.*



AT LONDON,
Printed by Arnold Hatfield. *fel*

1597

John Brooke





To the Reader.



Very man doth woonder (gentle Reader) at an Eclipse of the Sunne, or of the Moone, and gazeth at a Blazing Starre, and beholdeth with admiration, an exquisite picture, drawen with the penfill of a skilfull hand; yea all nouelties do please, be they neuer so small. But if they be once common, be they neuer so great woonders, no man vouchsafeth to giue them the looking on. But then as Seneca doth say: Non est Æthiopis inter suos insignitus color. The selfesame doth happen in man, and in the woonderfull workmanship of his bodie, and unspeakable excellencie of his soule: for if we regard his excellencie, he doth surpassse all creatures vnder heauen; and therefore the Aegyptians being raniished with the contemplation of mans dignitie and perfection, doubted not to call him a terrestriall god, and celestiaall creature, a messenger of the gods, Lord and master of things belowe, and a familiar friend vnto those who liue aboue, a miracle of nature, and as Seneca doth call him, Natures darling.

It is said, that after that Phidias a most famous caruer had made Minervaes shield, he engraued his owne portraiture so liuely, and deeply in the same, that it could neuer be taken out againe, without the defacing of the whole worke. So God him-

To the Reader.

selfe a far more excellent workman than Phidias, after he had made the vniuersall world, and all creatures therein, for a token of his skill, drew it anew in a small compasse, as an abridgement of all his works, to wit, when he made man, who is a Microcosme or little world, and in him printed his owne image and similitude, so liuely, that no power whatsoever is able to blot it out. This image and similitude is the soule and vnderstanding, which he would neuer haue printed in man, vnlesse he had first made him a bodie of a substance fit and apt to receiue that impression, and vnlesse also he had so skilfully framed it, that it should be woorthie to receiue so great an ornament, as the vnderstanding is. And therefore the bodie of man is made of a complexion most pure and delicate, and in shape comely and beautiful, and yet notwithstanding all these perfections which he hath in himselfe, few or none take delight in the studie of himselfe, or are carefull to know the substance, state, condition, qualitie, and vse of the parts of his owne bodie, although he be the honor of nature, and more to be admired than the strangest and rarest woonder that euer happened. The cause of this is no other, but because mans nature delighteth in nouelties, and neglecteth to search out the causes of those things which are common.

I haue therefore thought good, to giue thee in a knowne tongue, this little booke, written by the deepest of all Philosophers, who teacheth the vse of all the parts of mans bodie, their nature, qualitie, propertie, and substance, which may bring thee in reading of it, if reade it thou wilt, no lesse delight than profit, nor no lesse profit than delight.

Farewell.

Felix qui potuit rerum cognoscere causas.

The first Probleme.

Question.



*Monstrous all liuing creatures, why hath
Man onely his face and countenance lifted
vp towards the heauen?*

Answer.

Vnto this question there are diuers
answers: first, it proceedeth from the
will of the creator himselfe. And al-
though that answer be true, yet in this our purpose it
seemeth not to be of force, because that so all questions
might easily be dissolued.

Secondly, I answer, that for the most part euery work-
man doth make his first worke woorst, and then his se-
cond better, and so God creating all other beasts before
man, gaue them their face looking downe to the earth,
and then secondly he created man, as it doth appeere
in Genesis, vnto whom he gaue an honest shape lifted
vp vnto heauen. But yet this answer doth not seeme to
be to the purpose, because it is drawne from Diuinitie,
and doth also derogate from the goodnes of God, who
maketh all his works perfect and good.

Thirdly, it is answered, that man onely among all li-
uing creatures is ordained vnto the kingdome of hea-
uen, and therefore hath his face eleuated and lifted vp
vnto heauen, because that despising worldly and earthly
things, he ought to contemplate on heauenly things.

Fourthly, that the reasonable soule is like vnto angels,
and finally ordained towards God, as it appeereth by
Auerroes in the first *de anima*, and therefore he hath a fi-
gure looking vpward.

Fifthly, that a man is a microcosme, that is, a little
world, as it pleaseth *Aristotle* to say in the eight of his

THE PROBLEMES

Phys. and therefore he doth command all other living creatures, and they obey him.

Sixtly, it is answered, that naturally, there is vnto euery thing, and euery worke, that forme and figure giuen, which is fit and proper for his motion; as vnto the heauen roundnes, to the fire a pyramidall forme, that is, broad beneath and sharpe towards the top, which forme is most apt to ascend: and so man hath his face vp to heauen, to behold and woonder at Gods works.

Question. *Why is the head of beasts hairie?*

Answer. The answer according vnto the opinion of *Constant* is, that the haire is an ornament of the head, and of the braine, and the braine is purged and euacuated of grosse humors, by the growing of the haire, from the highest vnto the lowest parts, which passe through the pores of the exterior flesh, and do become drie and are conuerted into haire. This appeereth to be true, bicause that in al mans body there is nothing drier then the haire, for they are drier then the bones, as *Albertus Magnus* doth affirme, bicause that some beasts are nourished with bones, as dogs, but no beast can digest feathers or haire, but do voide them vndigested, and are so drie that they are vnfit for nutriment.

Secondly, it is answered, that the braine is purged fowre maner of waies, first, of superfluous waterie humors, by the eies: from melancholy, by the eares: of choler by the nose: of fleume by the haire, and that is the intent of the Phisition.

Question. *Why haue men longer haire on their head then other lining creatures.*

Answer. *Arist.* 3. de generat. animal. saith, that man hath the moistest braine of all lining creatures, from the which the sweat proceedeth, which is conuerted into the long haire of the head.

Secondly, it is answered, that the humors in man are fat,

OF ARISTOTLE.

fat, and do not become drie easilie, and therefore the haire grow long in him; in other beasts the humors are easilie dried, and therefore their haire grow not so long.

Question. Why do the haire take deeper roose in mans skin, then in other living creatures?

Answer. Bicause they haue greater store of nourishment in man, and therefore grow more into the inward part of man. And this is also the reason, why in other beasts the haire doth alter and change with the skin, and not in man, vnlesse it be sometime in a scarre or wound.

Question. Why haue women longer haire then men?

Answer. Bicause women are moister then men, and more flegmatick, and therefore there is more matter of haire in them, and by a consequence, the length also of their haire doth follow. And furthermore this matter is more increased in women then in men, from the interior parts, and especially in the time of their monthlie tearmes and flowres, bicause the matter doth then ascend, whereby the humor which breedeth the haire doth encrease. And *Albertus* doth saie, that if the haire of a woman in the time of hir flowers be put into dung, a venemous serpent is engendred of it.

The second answer is, bicause women want beardes, and so the matter of the beard doth go into the matter of haire.

Question. Why haue some men soft haire, and some men hard?

Answer. We answer with *Aristotle*, that the haire hath proportion with the skin: of which some is hard, some thick, some subtrill and soft, some grosse: therefore the haire which groweth out of a thicke and grosse skin, is thicke and grosse; and that which groweth of a subtil & fine, is fine and soft. Also when the pores are open, then there commeth forth much humor, and therefore

THE PROBLEMES

hard haire is ingendred : and when the pores are strait, then there do grow soft and fine haire. And this doth *Aristotle* shew in men, in whom we haue an euident token, bicause women haue softer haire then they, bicause that in women, the pores are shut and are strait by reason of their coldnes.

Secondly, bicause that for the most part, cholericke men haue harder and thicker haire then others, by reason of their heate, and bicause the pores are euer open in them, and therefore also they haue beards sooner then others. Whereupon the Philosopher saith, that those beasts which haue hard haire are bouldest, bicause that such haire proceedeth of heat and choler, the which choler maketh men to fight. *Aristotle* also giueth example in the Beare and the Boare : and contrariwise those beasts which haue soft haire, are fearefull, bicause they be cold, as the Hare and Hart. *Aristotle* doth also giue another reason of the softnes and hardnes of the haire, drawne from the climat where a man is borne : bicause that in a hot region harde and grosse haire is ingendred, as it appeereth in the *Æthiopians*, and the contrarie is true in a colde countrey, as towards the North.

Question. Why haue some men curled haire and some smooth?

Answer. The answer is, that the cause of the curling of the haire is great abundance of heate, so that if there be much heate in a man, then his haire doth curl, and grow vpward. And a signe of this is prooued true, bicause that sometimes a man doth enter into a bathe smooth haired, and afterward by the bath becommeth curled. And therefore the keepers of bathes haue often curled haire, and also the *Æthiopians* and cholericke men. But the cause of the smoothnes, is the abundance of moist humours, which tend downward, and a prooffe of

OF ARISTOTLE.

of this is, bicause that women for the most part haue smooth haire, bicause they haue much humiditie in them and small heate.

Question. Why do women shew their ripenes by the haire of their priuie part, and not else where, but men in the breast.

Answer. We answer Phisitian like, bicause that in man and woman there is aboundance of humiditie in that place, but more in women, bicause men haue the mouth of the bladder in that place, wherein the vrine is contained, of the which the haire in the breast is ingendred, and about the nauell. But of women is saide, that the humiditie of the bladder, and of the matrix or wombe is ioyned and meeteth in that low secer place, and therefore is dissolued and separated in that place, through much vapors and fumes, which are the cause of haire, and the like doth happen in other places where haire is, as vnder the armes.

Question. Why haue not women beards?

Answer. Bicause they want heat, as it appeereth also in some effeminate men, who are beardles for the same cause, bicause they are of the complexion of women.

Question. Why doth the haire growe in those which are hanged?

Answer. Bicause their bodies are exposed to the sun, the which through his heate, doth dissolue all the moisture into a fume or vapour, of which the haire doth grow and increase.

Question. Why is the haire of the beard grosser and thicker then else where, and the more men are shauen, the thicker and harder it groweth?

Answer. Bicause that according vnto the rule of the Phisitian, by how much the more the humor or vapour of any liquor is dissolued and taken away, by so much the more the humor remaining doth drawe to the same place: and therefore how much the more the haire is shauen,

THE PROBLEMES

shauen, so much the more the humors gather thither, and of them the haire is engendred, and do there also waxe hard.

Question. Why are women smooth and faire in respect of men?

Answer. The answer is according vnto *Arist. 1. de generat. animal.* bicause that in women all humiditie and superfluitie, which are the matter and cause of the haire of the body is expelled with their monthly tearmes, the which superfluity remaineth in men, and through vapors doth passe into haire. And a signe of this is, bicause women haue seldome any running at the nose, or impostume, or vlcer, bicause such matter is expelled also. And we see some old women begin to haue a beard in their old age, that is after fortie or fiftie yeeres of age, when their flowers haue ceased, as *Aristotle* doth teach 9, *de animalib.*

Question. Why doth man onely aboue all other creatures waxe hoary and gray, as Protagoras and Aristotle affirme?

Answer. The answer according vnto the Philosophers is, bicause that man hath the hottest hart of all liuing creatures: and therefore nature being most wise, least man should be suffocated through the heat of his hart, hath placed the hart which is most hot, vnder the brain which is most colde, to the end that the heat of the hart may be tempred with the coldnes of the braine; and contrariwise, that the coldnes of the braine, may be heated with the heate of the hart, that thereby there might be a temperature in both. A signe to proue this, is bicause that of all liuing creatures, man hath the worst breath if he be come to his full age. Furthermore man doth consume halfe his life in sleeping: which doth proceede of the great excesse of the coldnes and moisture of the braine, and by that meanes doth want naturall heate to digest and consume that
moistnes:

OF ARISTOTLE.

moistnes : the which heate he hath sufficiently in his youth, and therefore in that age is not graye, but in his olde age when heat faileth, and therefore the vapours ascending from the stomack, remaine yndigested and vnconsumed for want of naturall heate, and then putrifie, of which putrifaction of humors the whitenes doth follow, which is called graynes or hoarenes. Whereby it doth appeere that hoarenes is nothing else, but a whitenes of the haire, caused by the putrifaction of humors about the rootes of the haire, through the want of naturall heate in olde age. Sometimes also graynes is caused by the naughtines of the complexion, which may well happen in youth, and sometimes by reason of the moystnes yndigested, and sometimes through ouer great feare or care, as it appeereth in Marchants, Saylers, theeuers, from thence commeth those verses. *Cura, &c.*

Cura facis canos quamuis homo non habes annos.

Question. *Why doth red hayre grow white sooner then other?*

Answer. According vnto the opinion of *Aristotle*, bicause that rednes is an infirmitie of the hayre, for it is engendred of a weake and infirme matter, that is to say, of a matter corrupted with the flowers of the woman, and therefore they waxe white sooner then black hayre.

Question. *Why do Wolves growe grislie?*

Answer. The better to vnderstand this question, note the difference betwixt graynes and grislines, bicause that graynes is caused through the defect of a naturall heate, but grislines through deuouring and eating, as *Aristotle* witnesseth, 7. *de animal*. The Wolfe being a very deuouring beast, and a great eater, he letteth it downe gluttonously without chewing, and that at once ynough for three daies: of which meate grosse vapours

THE PROBLEMES

vapours are engendred in the Wolues body, and by a consequence grislines. Secondly, graynes and grislines do differ, bicause graynes is onely in the head, and grislines ouer all the body.

Question. Why do horses grow grisly or graye?

Answer. According vnto *Aristotle*, bicause they are for the most part in the sunne, and in his opinion also, heate doth accidently cause putrifaction, and therefore of that kinde of heat, the matter of the haire doth putrifie, and by a consequence, they are very quicklie pild.

Question. Why do men become balde, and trees fall their leaues in winter?

Answer. *Aristotle* doth giue the same reason for both, bicause that the want of moysture in both, is the cause of the want of the hayre & of the leaues. And this is proued, bicause that a man becōmeth balde through Venerie, bicause that leachery is a letting forth of naturall humiditie & heate. And so by that excesse in carnal pleasure, moysture is consumed, which is the nutrimēt of the hayre, and therefore baldnes doth insue. And this is euidently proued in Eunuches, and women which do not growe balde, bicause that they do not depart from that moistnes. And therupon Eunuches are of the complexion of women.

But if you aske why Eunuches be not balde, nor haue not the gowte, as *Hippocrates* saith? The answer is according vnto *Galen*, bicause the cause of baldnes is drines, the which is not in Eunuches, bicause they want their stones, the which do minister heate vnto all the parts of the bodie, and the heate doth open the pores, the which being open, the haire doth fall.

Question. Why are not women balde?

Answer. Bicause they are cold and moist, which are the cause that the haire remaineth: for moistnes doth giue

OF ARISTOTLE.

giue nutriment vnto the haire, and the coldnes doth binde the pores.

Question. *Why are bald men deceitfull? according vnto the verse:*

Sinon vis falli, fugias consortia calui.

Answer. Bicause baldnes doth witnesse a cholerike complexion, which is hot and drie, and cholerike men are naturally deceitfull, according vnto that verse.

Hirsutus, fallax, irascens, prodigus, audax.

And therefore it followeth, *2. primo ad vltimum*, that bald men are deceitfull and craftie.

Question. *Why are not blinde men naturally balde?*

Answer. Bicause that according vnto *Aristotle*, the eie hath much moysture in him, & that moysture which should passe through by the substance of the eies, doth become a sufficient nutriment of the haire, and therefore they are seldome balde.

Question. *Why doth the haire stand on ende when men are afraide?*

Answer. Bicause that in time of feare, the heat doth go from the outward parts of the body vnto the inward, to the intent to helpe the hart, & so the pores in which the haire are fastened are shut vp, after which stopping & shutting vp of the pores, the standing vp of the haire doth follow, as it is scene in brute beasts, as dogs, wilde bore, and peacockes.

Of the head.

Question. *Why is mans head round?*

Answer. Bicause that this figure is most fit to receiue any thing into it, as *Aristotle* doth affirme, *2. de cel.* and the head doth containe in him the five sences. This is also scene in a materiall spheare.

Question. *Why is the head hard?*

Answer.

THE PROBLEMES

Answer. Aristotle saith, bicause he doth containe in him the moistest part of the liuing creature: and also bicause the braine may be defended thereby as with a shield.

Question. Why is not the head absolutely round, but somewhat long?

Answer. To the ende that the three creekes or cels of the braine might be the better distinguished, that is, the fantasie in the forehead, the discoursing or reasonable part in the middle, and the memorie in the hindermost part.

Question. Why doth a man lift vp his head, towards the beauen when he doth imagine?

Answer. Bicause the imagination is in the forepart of the head or braine, and therefore it listeth vp it selfe, that the creekes or cels of the imagination may be opened, and that the spirits which helpe the imagination, and are fit for that purpose, hauing their concourse thither, may helpe the imagination.

Question. Why doth a man when he museth, or thinke on things past, looke downe towards the earth?

Answer. Bicause the cell or creeke which is behinde, is the creeke or chamber of memorie, and therefore that looketh towards beauen, when the head is bowed downe, and so that cell is opened, to the end that the spirits which perfit the memorie should enter in.

Question. Why is not the head fleshie like vnto the other parts of the body?

Answer. Bicause that according vnto Aristotle, the head would be too heauie, and could not stand stedfastly, and therefore it is without flesh. Also a head loaden with flesh doth betoken an euill complexion.

Question. Why is the head subiect vnto aches and griefes.

Answer. According vnto Constant, by reason of euill humours,

OF ARISTOTLE.

humours, which proceede from the stomacke, and ascend vnto the head, and disturbe the braine, and so cause the paine in the head. And sometime it proceedeth of ouer much filling of the stomacke: bicause that according vnto the opinion of *Galen*, two great sinewes passe from the braine to the mouth of the stomack, and therefore these two parts do suffer grieve alwaies together. Sometime the ach doth proceede of drinking strong wine, or fuming meats, as garlike and onions, & sometime of fleume in the stomacke, whereof spring quotidian feuers.

Question. Why haue women the headach more ofiner then men?

Answer. *Albertus* saith, that it is by reason of their monthly tearmes, which men are not troubled with, and so a most vncleane and venemous fume is dissolued, the which seeking a passage vpward, doth cause the head to ake.

Question. Why is the braine whise?

Answer. There is two answers. The first, bicause it is cold, and coldnes is the mother of white, as the Philosopher doth teach.

The second, bicause it may receiue the similitude and likenes of all colours, which the white colour can best do, bicause it is most simple.

Question. Why are all the senses in the head?

Answer. Bicause (as *Albersus* saith) the braine is there, of which all the senses do depend and are directed by it, & by a consequent it maketh all the spirits to feelee, and by it all the members are gouerned.

Question. Why cannot a man escape deash, if the braine or hart be hurt?

Answer. Bicause the hart and the braine are two of the principallest parts which conserue life: and therefore if they be hurt, there is no remedie left for cure.

Question.

THE PROBLEMES

Question. *Why is the braine most moist?*

Answer. Bicause it may easily receiue euery impression, which moisture can best do, as it appeereth in waxe, which doth easilie receiue the print of the seale when it is soft.

Question. *Why is the braine cold?*

Answer. This is answered two waies. First, bicause that by his coldnes it may cleere the vnderstanding of man, and make it subtile. Secondly, that by the coldnes of the braine the heate of the hart may be tempered: & this is *Aristotles* intent, *lib. de animal.*

Of the Eyes.

Question. *Why haue we one nose and two eyes?*

Answer. Bicause the sight is more necessarie for vs then the smelling: and therefore it doth proceede of the goodnes of nature, that if we receiue any hurt or losse of one eie, that yet the other shoulde remaine, vnto the which the spirit, with which we see, called *spiritus visus*, is directed when the other is out, as it is plaine in the common perspective.

Question. *Why haue children in their youth great eies, and why do they become smaller and lesser in their age?*

Answer. According vnto *Aristotle de generat.* it proceedeth from the great humiditie of the braine, and for the same cause children are verie sleepe.

Question. *Why do blacke eies see well in the day time, and badly by night?*

Answer. According vnto the opinion of *Aristotle*, it proceedeth from the want of fire, and for the assembling and meeting together of light and humour in the eies, which are lightened by reason of the sunne, which doth lighten the eyfie humour of the eie and purge it, and in the absence of the sunne those humours become
darke

OF ARISTOTLE.

darke and blacke, and therefore the sight not so good.

Question. Why doth the blewish graye eie see badly in the day time, and well by nights?

Answer. Bicause (saith Aristotle) grainesse is light and shining of it selfe, and the spirits with which we see are weakned in the day time, and strengthened in the night.

Question. Why be mens eies of diuers sorts?

Answer. This proceedeth, saith Aristotle, by reason of the diuersitie of humours. The eie therefore hath foure coverings, and three humors. The first covering is called Consolidatiue, which is the outermost, which is strong and fat. The second is called a hornie skin or covering, to the likenes of a horne, and that is a cleere covering. The third is called Vnea, of the likenes of a blacke grape. The fourth is called a Cobweb: but according vnto the opinion of some, the eie doth consist of seuen coverings or skins, and three humors. The first humor is called Albugineus, for the likenes vnto the white of an egge. The second Glaciall, that is like vnto yce or cristalline. The third Vitreus, that is cleere like a glasse. And that diuersitie of humours causeth the diuersitie of eies.

Question. Why are men which haue but one eie good Archers, & why do good Archers commonly shut one eie, & why do such as behold the stars looke thorow a trunk with one eie?

Answer. This matter is handled in the perspective art, and the reason is, as it dooth appeere in the booke of causes, bicause that euery vertue and strength vnited and knit together, is stronger then it selfe dispersed and scattered. Therefore all the force of seeing dispersed into two eies, the one being shut, is gathered vnto the other, and so the sight is fortified in him, and by a consequence he doth see better and certainer with one eie, being shut, than both being open.

B

Question.

THE PROBLEMES

Question. *Why do such as drinke much and laugh much, shed teares?*

Answer. Bicause that whilest they drinke and laugh without measure, the aire which is drawn in doth not passe out through the windpipe, & so with force is directed and sent to the eies, and by their pores passing out, doth expell the humors of the eies, the which humors being so expelled, do bring teares.

Question. *Why do such as weep much, vrine but little?*

Answer. Bicause (saith Aristotle) that the radicall humiditye of a teare and of vrine, are of one and the same nature. And therefore where weeping doth increase, there vrine doth diminish. And that they be of one nature it is plaine by the taste, bicause they are both salt.

Question. *Why do some which haue cleere eies, see nothing at all?*

Answer. By reason of the opilation, and naughtines of the sinewes with which we see. For the temples being destroyed, the strength of the sight cannot be carried from the braine vnto the eie. As the Philosopher doth teach, *lib. de sens. & sensato.*

Question. *Why is the eie cleere and smooth, like vnto a glasse?*

Answer. Bicause the things which may be seene, are better beaten backe from a smooth thing then otherwise, that thereby the sight should be strengthened.

Secondly I answer, it is bicause the eie is very moist, above all the parts of the body, & of a wattrish nature. And as the water is cleere & smooth, so likewise the eie.

Question. *Why do men which haue their eies deepe in their head, see well a faine off, and quickly, and the like of other beasts?*

Answer. Bicause (saith Aristotle *2. de gener. animal.*) the force and power by which we see is not dispersed in them, but doth go directly vnto the thing which is seene.

And

OF ARISTOTLE.

And this is prooued by a similitude: bicause that when a man doth stand in a deepe ditch, or well, he doth see in the day time, standing in those places, the stars of the firmament, as *Aristotle* doth teach, in his treatise *De forma speculi*, bicause that then the power of the sight and the beames are not scattered.

Question. Wherefore do those men which haue their eyes far out, and not deepe in their head, see but meanely, and no far distance?

Answer. Bicause (saith *Aristotle*) the beames of the sight which passe from the eye, are scattered on every side, & do not go directly vnto the thing which is seene, and therefore the sight is weakened.

Question. Why are many beasts borne blinde, as lions whelpes, and dogs whelps?

Answer. Bicause such beasts are not as yet of perfect ripenes and maturitie, & the course of nutriment doth not worke in them. And this is prooued by a similitude of the swallowes, whose eyes if they be taken out when they are little ones in the nest, will grow againe. And this is plaine in many other beasts, which are brought forth before their time, as it were dead, as whelps, beares, & this reason doth belong rather vnto the perspective, then the naturall Philosopher.

Question. Why do the eyes of a woman which haue her flowers, staine a new glasse, as *Aristotle* saith, *De som. & vigil.* And this is the like probleme, why doth the Basilisque kill a man with his sight?

Answer. To the first the answer is, that when the flowers do runne from the woman, then a most venemous aire is dissolued in them, the which doth ascende vnto the womans head, and she hauing grieue of her head, doth couer it with many vailles and kerchiefes: and bicause the eyes are full of small vn sensible holes, which are called pores, there the aire seeketh a passage,

THE PROBLEMES

and so doth infect the eies, which are full of blood. And their eies do also appeere dropping, and full of teares, by reason of the euil vapour which is in them, and those vapours are euapourated and multiplied, vntill they come vnto the glasse before them: and by reason that such a glasse is very sound, cleane, and smooth, it doth easily receiue that which is vnclane.

To the second it is answered, that the Basilisque is a very venemous and infectious beast, & that there passe from his eies venemous vapours, the which are multiplied vnto the thing which is seene by him, and euen vnto the eie of man, the which venemous vapours or humors entering into the bodies, do infect them, and so in the end the man dieth. And this is also the reason why the Basilisque looking vpon a shield perfectly wel made with fast clammy pitch, or any hard smooth thing, doth kil himselfe, bicause the humors are beaten backe from this smooth hard thing vnto the Basilisque, by which beating backe he is killed. And the like is said of a woman when she hath hir monethly disease. Whereof it followeth, that some olde women do hurt themselves when the looke vpon glasses, or other firme and solide things in the time of their rearmes.

Question. Why is not the sparkeling of cats eies and wolves eies seene in the light, but in the darke?

Answer. Bicause that the greater light doth darken the lesser, and therefore in a greater light that sparkeling cannot be seene: but the greater the darkenes is, the easlier it is seene, and is made more strong and shining, bicause it is not then hindered by a greater externall light, which might darken it.

Question. Why doth a man bebolding himselfe in a glasse presently forget his owne disposition?

Answer. The answer is made in *lib. de forma speculi*, that the image seene by the glasse, doth represent it selfe weakely

OF ARISTOTLE.

weakely and vndirectly vnto the power of the sight: and bicause it is represented weakely, it is weakely also apprehended, and by a consequence is not long retained.

Question. *Why is the sight recreated and refreshed by a greene colour, as this verse doth shew?*

Fons, speculum, gramen, oculis sunt alleniamen.

Answer. Bicause the greene colour doth meanly moue the instrument of the sight, and therefore doth comfort the sight: but this doth not blacke or white colour, bicause these colours do vehemently stirre and alter the organe & instrument of the sight, & therefore make the greater violence: but by how much the more violent the thing is which is felt or scene, the more it doth destroy and weaken the sence: as *Aristotle* doth teach, 2. *de anima*.

Of the nose.

Question. *Why doth the nose stand out further then the other parts of the head?*

Answer. There are two answers. The first, bicause the nose is as it were the fincke of the braine, by the which the fleume of the braine is purged. And therefore it doth stand so forth, least the other part should be defiled.

The second, according vnto *Const.* is, bicause the nose is the beaurie of the face, and therefore it doth shew it selfe and shine. It doth smell also and adorne the face, as *Basilius* saith, *De discipl. schol.*

Question. *Why hath man the worst smell of all other liuing creatures, as it doth appeere, 2. de anima.*

Answer. Bicause that man, as the *Commentator* saith, in respect of his quantitie hath the most moistest braine of all creatures. And therefore by that exceeding moystnes and coldnes, the braine wanteth a good disposition, & by a consequence the smelling, seeing the instru-

THE PROBLEMES

ment is not good, as *Aristotle* and *Themist.* do teach. Yea, some men there be which do not smell at all.

Question. Why doth the *Vulture* or *Cormorant* smell very well, as the *Commentator* doth say?

Answer. Bicause they haue a verie drie braine, and therefore the aire carrying the smell, is not hindred by the humiditie of the braine, but doth presently touch his instrument. And therefore he saith, that the *Vultures*, *Tygers*, and other beasts, came 500. miles to the dead bodies after a battle in *Greece*.

Question. Why did nature make the nostrils?

Answer. For three commodities. First, bicause that the mouth being shut, we draw breath in by the nostrils to refresh the heart with. The second commoditie is, bicause that the aire which proceedeth from the mouth, doth sauer badly, bicause it doth sauer of the vapours which rise from the stomach, but that which we breathe from the nose is not so noysome. The third, bicause the fleume which doth proceede from the braine is purged by them.

Question. Why do men sneese?

Answer. Bicause that the expulsive vertue or power, and the sight should thereby be purged, and the braine also, from superfluities: bicause that as the lungs are purged by coughing, so the sight & the braine by snee-sing. And those which sneese oft, are saide to haue a strong braine: and thereupon the Physicians do giue sneeing medicaments to purge the braine. And such sicke persons as cannot sneese, die quickly, bicause it is a signe that their braine is wholly stuffed with euill humors which cannot be purged.

Question. Why cannot such as are apoplectickes, sneese, that is, such as are subiect easily to bleed?

Answer. Bicause the passage and ventricles of the braine are stopped in them, and if they could sneese, their

OF ARISTOTLE

their apoplexie would bee loosed.

Question. *Why doth the heate of the sunne prouoke sneezing, and not the heate of the fire?*

Answer. Bicause the heate of the sunne doth onely dissolue, and not consume, and therefore the vapour dissolued is expelled by sneezing: but the heate of the fire doth dissolue and consume, and therefore doth rather consume sneezing, then prouoke vnto it.

Of the Eares.

Question. *Why do all beasts moue their eares, and not man?*

Answer. Bicause there is in man a certaine muscule neere vnto the iawe, which doth hinder motion in the eares, and therefore that muscule beeing extended and stretched, men do moue their eares, as it hath bene seene in diuers men: but other beasts want that muscule or fleshy sinewe, and therefore doth moue their eares.

Question. *Why is raine prognosticated by the pricking vp of the Asses eares.*

Answer. Bicause the Ass is a very melancholy beast, and it proceedeth from melancholie that he doth foresee raine to come. In the time of raine all beasts doe pricke vp their eares, and therefore the Ass perceiving that it will raine, doth pricke vp his eares before it come.

Question. *Why haue small birds no eares?*

Answer. Aristotle doth answer, and say that nature doth giue vnto euery thing that which is fit for it. But if shee should haue giuen birds eares, their flying would haue bin hindered by them. Likewise fish do want eares, bicause they would hinder their swimming, and haue

THE PROBLEMES

onely certaine litle holes, through which they do heare, as *Aristotle* doth declare by the sea calfe.

Question. *Why haue Bass eares, seeing they do seeme to be birds?*

Answer. Bicause they are partly birds in nature, in that they doe flie, by reason whereof they haue wings: And partly they are of the nature of foure footed beasts, and in that respect they are hairy, bicause they are wise, and therefore nature as being wise, gaue them eares.

Question. *Why hath onely man round eares?*

Answer. Bicause the shape of the whole and of the parts should be proportionable, & especially in things of one nature: for as a drop of water is round, so the whole water, as *Iohn de sacro Bosco* doth prooue. And so bicause mans head is round, the eares incline towards the same figure: but the heads of other beasts are somewhat long, and so their eares are drawn into length also.

Question. *Why did nature giue liuing creatures eares?*

Answer. For two causes. First, bicause that with them they should heare. Secondly, bicause that by the eares cholerike superfluitie is purged: for as the head is purged from fleugmatike superfluitie by the nose, so from cholerike by the eares.

Of the Mouth.

Question. *Why hath the mouth lippes to compasse it?*

Answer. According vnto *Consil.* bicause the lips doe couer and defend the teeth: for it were vnseemely that the teeth should alwaies be seene. Another answer is, that the teeth are of a cold nature, and would therefore be easily hurt, if they were not couered with the lips. Another morall reason is, bicause a man should not be too hastie in speech.

Question.

OF ARISTOTLE.

Question. *Why hath man two eares, and two eyes, and but one mouth?*

Answer. Because a man should speake but little, and see and heare much. And withall, *Aristotle* doth say, that the hearing is the sense with which learning is gotten. And he saith, that the sight doth shew vs the difference of many things. And *Seneca* doth agree vnto this, affirming, that nature hath enuironed the tongue with a double cloister, the teeth and lips, and hath made the eares open and wide, and hath giuen vs but one mouth, to speake little, though we heare much.

Question. *Why hath a man a mouth?*

Answer. For many commodities. First, because the mouth is the gate and doore of the stomack. Secondly, because the meate is chewed in the mouth, and prepared and made readie for the first digestion. Although *Anicen* doth hold that the first digestion is made in the mouth. Thirdly, because that the aire drawn into the hollow of the mouth for the refreshing of the hart, is made more pure and subtile. And for many other causes, which shall hereafter appeere.

Question. *Why are the lips moueable?*

Answer. Because of forming the voice and words, which cannot be perfectly done without them. For as without *a, b, c.* there is no writing, so without the lips, no voice can well be formed.

Question. *Why do men gape?*

Answer. The glosse vpon the last part of *Hippocrates Aphorismes* saith, that it proceedeth of wearisomnes, as when a man sitteth among such as he doth not knowe, whose companie he could willingly be rid of.

Secondly, gaping is caused of the thicke fumes and vapours which fill the iawes, by the expulsion of the which is caused the stretching out and extension of the iawes, & opening of the mouth, which is called gaping.

Question.

THE PROBLEMES

Question. *Why doth a man gape when he seeth another man gape?*

Answer. This proceedeth of the imagination. And this is proved by a similitude: for an Ass is animal valde sensible, by reason of his melancholic; because he doth retaine his superfluitie a long time, and would neuer eate nor pisse, ylesse he should heare another pisse. And so a man doth gape through imagination, when another man doth gape.

Of the Teeth.

Question. **VV***hy do the teeth onely, among all other bones feele with the sense of feeling?*

Answer. Because, as *Auicen* and *Galen* do say, they might discerne of heate and cold which hurt them, which the other bones neede not.

Question. *Why haue men more teeth than women?*

Answer. By reason of the abundance of heate and blood, which is more in men than in women.

Question. *Why do the teeth growe unsill the end of our life, and not the other bones?*

Answer. Because they should otherwise be consumed with chewing and grinding.

Question. *Why doe teeth onely come againe when some fall, or bee taken out, and other bones taken away growe no more?*

Answer. Because that, according vnto *Aristotle*, all other bones are ingendred of the humiditie which is called radicall, and so they breed in the wombe of the mother: but the teeth are ingendred of nutritiue humiditie, which is renewed and increased from day to day.

Question. *Why do the foreteeth fall in yowthe, and growe againe, and not the cheeke teeth?*

Answer. This proceedeth of the defect of matter and
of

OF ARISTOTLE.

of the figure, because the foreteeth are sharpe, and the others broad. But according vnto *Aristotle*, there is another answer: that is, that it is the office of the foreteeth to cut the meate, and therefore they are sharpe: and the office of the others is to chew the meate, and therefore they are broad in fashion, which is fittest for that purpose.

Question. Why do the foreteeth growe soonest?

Answer. Because we want them sooner in cutting, than the others in chewing.

Question. Why do the teeth growe blacke in the olde age of liuing creatures?

Answer. This proceedeth of the corruption of the meate, and the corruption of fleume, with a naughtie cholerike humor.

Question. Why are colts teeth yellow and of the colour of saffron when they be yong, and waxe white when they be old?

Answer. *Aristotle* saith that a horse hath abundance of watric humors in him, the which in his youth are digested and conuerted into grosnes, but in old age heate is diminished, and the watric humors remaine, whose proper colour is white.

Question. Why did nature giue liuing creatures teeth?

Answer. *Aristotle* saith 2. de generat. animal. to some to fight with and for the defence of their life, as vnto wolues and boares: vnto some to eat with, as vnto horses: vnto some for the forming of their voice, as vnto men, as it appeereth by the Commentator in the booke De animal.

Question. Why do horned beasts want their upper cheeke teeth?

Answer. According vnto *Aristotle* in his booke de animal. hornes & teeth are caused of the selfe same matter, that is, of nutrimental humidity, & therefore the matter which passeth into hornes, turneth not into teeth,
and

THE PROBLEMES

and therefore the vpper teeth want. And such beasts, according vnto *Aristotle*, cannot chew well: whereupon for want of teeth they haue two stomackes by a consequence, and so do chew their meate twise: and they doe first conuey their meate into their first stomacke or belly, and then returne it from whence it came & chew it.

Question. Why are some beasts brought forth with teeth, as kids & lambs, & some without, as men?

Answer. Nature doth not want in things necessarie, nor abound in things superfluous: and therefore because these beasts nor long after they are fallen doe neede teeth, are fallen with teeth: but men are nourished with the mothers dugges for a time, and therefore for a time want teeth.

Question. Why haue not birds teeth?

Answer. Because the matter of reeth passeth into their beake, and therefore there is their digestion: or els it is answered, that although they do not chew with teeth, yet their heate in digestion doth supplie the want of teeth.

Of the toong.

Question. Why is the toong full of pores?

Answer. According vnto *Aristotle de anim*, because the toong is the meane whereby wee taste, & through the mouth into the pores of the toong, the taste doth come vnto the sence of tasting.

Otherwise it is answered, that a frothy spetle is sent vnto the mouth by the tong from the lungs, moistening the meate, and making it readie for the first digestion: and therefore the toong is full of pores, because this spetle may haue passage through him.

Question. Why doth the toong of such as are sicke of agues, iudge all things to be bitter?

Answer.

OF ARISTOTLE.

Answer. Bicause the stomacke of such persons is filled with cholericke humors, and choler is very bitter, as it appeereth by the gall, and therefore this bitter fume doth infect the toong, and so the toong being full of these tastes, doth iudge them bitter, although the bitterness be not in the meats, but in the toong.

Question. *Why doth the toong water when we heare soure and sharpe things named?*

Answer. Bicause the imaginative vertue or power, is of greater force then the power and facultie of tasting: and when we do imagine of any taste, we conceiue it by the power of tasting, as by a meane, and bicause there is nothing felt by taste, but by the meane of that spetle, therefore then the toong doth water.

Question. *Why do some stammer and some lisse?*

Answer. This happeneth for many causes. Sometimes through the moystnes of the toong and braine, as in children, which cannot speak plainly, nor pronounce many letters. Sometime it happeneth by reason of the shrinking of certaine sinewes which are corrupted with fleume: for such sinewes there be which goe to the toong.

Question. *Why are the toongs of Serpents and mad dogs venomous?*

Answer. Bicause of the malignitie & fumositie of the venomous humor which doth predominat in them.

Question. *Why is a dogs toong apt and fit for medicine, & contrariwise a horse toong pestiferous?*

Answer. This is by reason of some secret propertie, or els it may be said, that the toong of a dog is full of many pores, and so doth draw and take away the viscositie of the wound. Some say that a dog hath by nature some humors in his toong, with the which by licking he doth heale, and the contrarie is in a horse.

Question. *Why is spittle white?*

Answer.

THE PROBLEMES

Answer. By reason of the continuall mouing of the toong, whereof heate is ingendred, which doth make white this superfluitie which is spetle, as it is seene in the froth of water.

Question. Why is spetle vsauory, and without taste?

Answer. If it had a certaine determined taste, then the toong should not taste at all, but should onely haue the taste of spetle, and so could not receiue other tastes.

Question. Why doth the spetle of one who is fasting, beate an impostume?

Answer. Bicause, according vnto *Auicen*, it is well digested and made subtile.

Question. Why do some abound more in spetle than other some?

Answer. This doth proceede of a fleugmatike complexion, which doth predominate in them: and therefore the Physicians do say, that such should take heede of a quotidian ague, which ariseth of the predomination of fleugme. The contrarie is in those which spet little, bicause heate doth abound in them, which doth consume the humiditie of spetle, and so the defect of spetle is a signe of a feuer.

Question. Why is the spetle of a man which is fasting, more subtile and white, than of one who is full?

Answer. Bicause that that spetle is without the viscolitie of meate, which is woont to make the spetle of one who is full, grosse and thicke.

Question. From whence proceedeth the spetle in man?

Answer. From the froth of the lungs, which according vnto the Physicians, are the seate of fleugme.

Question. Why are such beasts which often go together for generation, very full of foam and froth?

Answer. Bicause that then the lights and the hart are in a great motion of lust, and therefore there is ingendred in them much frothy matter.

Question.

OF ARISTOTLE.

Question. *Why haue not birds spetile?*

Answer. Bicause they haue very drie lungs, according vnto Aristotle in his booke de animal.

Question. *Why do such as are called Epilepti, that is, such as are overwhelmed, and as it were drowned in their owne blood, and are diseased, saour badly and corruptly?*

Answer. The answer according vnto the Phisitions is, bicause the peccant matter lieth in the head: but if he do vomite, then the matter is in the stomacke: but if they vrine much, then the matter is in the passage of the vrine: but if they begin to haue seede, then it is in the vessels of the seede, and according vnto this the Phisitions do purge them.

Question. *Why doth the toong loose sometime the vse of speaking?*

Answer. The answer is out of Hippocrat. that this doth happen through a pallie, or apoplexie, that is, a sudden effusion of blood, and of a grosse humor. And sometimes also by the infection *spiritus animalis*, in the middle cell of the braine, which doth hinder that the spirit is not carried vnto the toong: and this is Galeni meaning, for by the expressing of the toong, many actions of diuers passions are made manifest.

Of the roose of the Mouth.

Quest. **W**Hy are fruits, before they be ripe, of a naughty relish, or bitter, and afterward sweete?

Ans. A naughty relish in taste proceedeth of coldnes and want of heat in grosse & thick humidity: but a sweet taste proceedeth of sufficient heate. And therefore in ripe fruite the humiditie is subtile through the heate of the sunne, and therefore such frutes are commonly sweete: but before they be ripe the humiditie is grosse, and not subtile, for want of heate, and therefore then the fruits

THE PROBLEMES

fruits are bitter and sower.

Question. Why be we rather delighted with sweete tastes, than with bitter, or any other?

Answer. Bicause nature is delighted with sweetnes. The reason is, bicause a sweete thing is hot and moist, and through his heate, it doth dissolue and consume superfluous humidities, and by his humiditie immunditie is washed away: but a sharpe eager taste, by reason of the cold which doth predominate in it, doth binde ouermuch, and pricke, and offendeth the parts of the bodie in purging. And therefore we doe not delight in that taste, bicause the Phisitions counsell vs to eate nothing which is bitter in the sommer, nor in a great heat: and the reason is, bicause bitternes doth breede heate: but we should eate bitter things in winter onely. And therefore Aristotle doth say, that sweet things are gratefull vnto nature and do greatly nourish.

Question. Why doth a sharpe taste, as of vineger, prouoke appetite rather than any other?

Answer. Bicause it is cold and doth coole. Now it is the nature of cold to desire, and draw, and therefore is cause of appetite. Marke that there are nine kindes of tastes, three which proceed from heat, three from cold, and three from a temperate meane.

Question. Why do we draw in more aire, than we breathe out?

Answer. Aristotle, and Albertus in his booke de morali cordis, do answer, that much aire is drawn in, and is turned into a nutriment, and with the vitall spirits is contained in the lungs. And therefore a beast is not suffocated so long as he receiveth aire with the lungs, in which some part of the aire remaineth also.

Question. Why doth the aire seeme so be expelled and put forth, seeing that indeede the aire is invisible by reason of his raritie and thinnes?

Answer.

OF ARISTOTLE.

Answer. Because that the aire which is receiued into vs, is mingled with vapours and fumosities of the hart, by reason whereof it is made thicke and so is seene. And this is prooued by experience, because that in winter we see our breath, because the coldnes of the aire dooth binde the breath mixed with fumosities, and so it is thickened and made grosse, and by a consequence it is seene.

Question. *Why haue some men a stinking breath?*

Answer. The answer is, according to the Phisitions, because there doth arise euill fumes from the stomacke: & sometime it proceedeth of the corruption of the airie parts of the bodie, as of the lungs. And the breath of leapers is so infected, that it doth poison the birds which are neere vnto them, because their inward parts are verie corrupt, as it appeereth by *Const. defin.* because that leprosie is a nourishment of all the parts of the bodie, together with the corrupting of them: and it doth begin in the blood, and end in the exterior members of the body.

Question. *Why be leapers hoarse?*

Answer. Because that in them the instruments vocal are corrupted, that is the lights.

Question. *Why do men become hoarse?*

Answer. Because of a rheume descending from the braine, filling the conduits of the lights: or sometimes through som impostumes in the throte or rheume gathered in the necke.

Question. *Why haue all the small of all lining creatures the shrillest voices, a cove onely excepted, and a woman shriller than a man and smaller?*

Answer. According vnto *Aristotle*, by reason of the composition of the vaines, and vocall arteries, that is, where the aire doth enter in, by which vaines and arteries the voice is formed: as it appeereth by a similitude,

THE PROBLEMES

tude, bicause a small pipe doth sounde shriller then a great. And so also in women, bicause the passage where the voice is formed, is made narrowe and strait, by reason of cold, bicause it is the nature of cold to binde: but in men that passage is open and wider through heate, bicause it is the propertie of heate to open and dissolue. Also it proceedeth in women through the moystnes of the lungs and weakenes of heate. Yoong men and diseased men haue sharpe and shrill voices for the same cause. And that is the naturall cause why a man-child at his birth time doth crie *a, i*, which is a bigger sound, and the femall *e*, which is a slenderer sound, as it pleaseth *Laberintus*, when he saith, *Masculus a proferet*.

Question. *Why doth the voice chaunge in men and women, in men at 14. in women at 12. in men, when they begin to yeelde seeds, in women, when their breasts begin to grow, as Aristotle doth say, lib. de animal.*

Answer. Bicause that then, saith *Aristotle*, the beginning of the voice is slackened and loosed: and he prooueth this by a similitude of a string of an instrument let downe or loosed, which giueth a greater sound. And he prooueth it another way, bicause that beasts which are gelded, as Capons, Eunuches, and gelded men, haue softer and slenderer voices then others, by reason they want stones.

Question. *Why do men become hoarse, by the looking of a wolfe.*

Answer. The answer, according vnto *Aristoteles* is, bicause a wolfe is a very colde beast in the braine, and thereupon hath a very heauie head. If then the spirite of the sight or beames be directed and go towardes the wolfe, it doth draw som coldnes from him to the breast, and then of that coldnes the breaste is straightened, where the instruments are, by which the voice is formed: bicause a wolfe cannot send forth any other fumosities,

OF ARISTOTLE.

moities, and they are breathed out into the aire, that aire next vnto him is infected, and the next aire by that aire, and so another aire, vntill it come vnto the man: then that aire being infected, is drawne in by man, and so doth make him hoarse, by closing the vocall arterie or windpipe. And it hath been alreadie said that a wolfe is a very rauinous and deuouring beast, and doth eate as much at once as will serue him for three daies, and therefore by opening his mouth doth cast forth rawe and grosse humours vndigested, by the which the next aire vnto him is infected, and so the next vnto it, vntill it come vnto the looker on, and so doth infecte like the Basilisque, which doth cast forth venemous aires, which infect men by the eies.

Question. *Why is not a wolfe hoarse when a man doth looke on him?*

Answer. Bicause a man is not so cold as a wolfe, nor of so malignant a qualitie. And for the like reason this probleme is mooued.

Question. *Why doth a man which is slaine, bleede when he is seene of him which killed him?*

Answer. This proceedeth of a diuine cause, & not of a naturall, bicause his blood doth cal for reuenge against the murderer. But if there be any naturall cause of it, this is it. The committer of this wicked fact calling it to minde, is very sorie for it, and repenteth him of it, & is in anguish of minde, & in a great heat, through the strong imagination which he hath conceiued, and by that meanes all his spirits do stir and boile and repaire vnto the instruments of the sight, & so go out by the beames of the sight of the eies vnto the woundes which are made, the which if they be fresh, do presently fall a bleeding. Secondly, this is done by the helpe of the aire which is breathed in, the which being drawne from the wound, causeth it to bleed.

THE PROBLEMES

Question. *Why do small birds sing more and lower then great ones, as it appeereth in the Larke and Nightingale?*

Answer. Bicause the spirits of small birds are subtile and soft, and the organs and conduits strait, as it appeereth in a pipe: and therefore follow easily any desire, and so do sing very oft.

Question. *Why do the male sing more then the female, as it appeereth in all living things?*

Answer. It proceedeth from the desire of carnall copulation, bicause that then the spirits are mooued throughout all the bodie with the foresaid appetite and desire. And speaking generally, the females are colder then the males.

Question. *Why do Bees, Waspes, Flies, and Locusts, and many other such like beasts, make a noyse, seeing they haue no lungs nor instruments of the voice?*

Answer. According vnto *Aristotle*, there is in them a certaine small skinne, the which when the aire doth strike, it causeth that sound, and therefore there is a strange sound.

Question. *Why do not fish make a sound?*

Answer. Bicause that according vnto *Aristotle*, they haue no lights, but onely gills, nor yet hart, and therefore they neede not the drawing in of aire, and by a consequence they make no noise: bicause that as *Aristotle* dooth say, a voice is a percussion of the aire which is drawn.

Of the Necke.

Question. *Why hath a living creature a necke?*

Answer. Bicause the necke is the supporter of the head, as *Aristotle* doth teach: and therefore the necke is the middle betwixt the head and the bodie, to the intent that by it and by his sinewes, as by
certaine

OF ARISTOTLE.

certaine meanes and waies, motion and sence of the body might be conueyed throughout all the bodie, and that by means of the necke, as it were by a distance, the hart which is very hot might be separated from the braine.

Question. Why do some beasts want a necke, as Serpents, fishes?

Answer. Bicause such beasts want a hart, and therefore they do not want that distance which we haue spoken of: or els we answer, that they haue a necke in some inward part of them, but it is not distinguished outwardlie from the hart and the head.

Question. Why is the necke full of bones and ioints?

Answer. Bicause it may beare & sustaine the head the stronger. And also bicause the backe bone is ioyned to the braine in the necke, and from thence it receiueth marrowe, which is of the same substance with the brain.

Question. Why haue some beasts long neckes, as Craines, Storkes, and such like?

Answer. Bicause such beasts do seeke their living in the bottome of the water, and therefore do want such neckes. And some beasts haue short neckes, as Sparrow-hawkes, bicause such are rauinous beasts, and therefore for strength want such short neckes: as it doth appeere in an oxe, which hath a short necke, and is therefore strong.

Question. Why is the necke hollowe, and especially before about the soong?

Answer. Bicause there be two passages, whereof the one doth carrie the meate vnto the nutritiue instruments, as to the stomacke and liuer, and is called of the Greekes *Isophagus*: the other is the windpipe.

Question. Why is the arterie made like rings & circles?

Answer. The better to bow, and to giue a good sounding againe.

THE PROBLEMES

Question. *Why doth a chicken moue a great space after his head is off, and a man beheaded neuer stirresh?*

Answer. Bicause a chicken and such like, haue strait sinewes and arteries, and therefore the spirit of moouing continueth long after the head is off: but men & other beasts haue long and large sinewes and arteries, and therefore the motiue spirits doe quickly depart from them, and by a consequent cannot mooue their bodies.

Of the shoulders and armes.

Quest. **W***hy hath a man shoulders and armes?*

Answer. To giue and carry burdens, according vnto *Aristotle*.

Question. *Why are his armes round?*

Answer. For the swifter and speedier worke, bicause that that figure is fit to mooue.

Question. *Why are the armes thicke?*

Answer. Bicause they should be strong to lifte and beare burdens, to thrust, and giue a strong blowe: so their bones are thicke, bicause they containe much marrow, for feare least they should be easily corrupted and marred: but marrow cannot so well be contained in small bones as in great.

Question. *Why do such as are diseased and in grieve, vncover & couer their armes, & such also as are in an agonie?*

Answer. Bicause such are neere vnto death, and it is a signe of death, by reason of great grieve which causeth that vncovering, as *Hippoc.* doth teach, *lib. prognost.*

Question. *Why do the armes become small and slender in some sickness, as in mad men, and such as are sicke of the droppe?*

Answer. Bicause all the parts of the body doe suffer the one with the other, and therefore one member being

OF ARISTOTLE.

ing in griefe, all the humours do concurre and runne thither to get succour and helpe to the foresaid griefes. For when the head doth ake, all humours of the armes do runne to the head, and therefore the armes become small and slender, bicause they want their proper nouriture.

Question. *Why haue brute beasts no armes?*

Answer. Their forefeete are in steed of armes, and in their place. Or els we may answer more fitly, bicause all beasts haue some parts for their defence, and to fight with, as the Wolfe the teeth, the Cow hornes, a Horse the hinder feete, birdes the beake and wings: but onely man hath his armes.

Of the Hands.

Question. **V***Why hath a man hands, and an ape also which is like vnto a man?*

Answer. The hand is an instrument which a man doth especially want, bicause many things are done by the hands, and not by any other part, as *Aristotle* doth teach.

Question. *Why are some men ambidexters, that is, vse the left hand as well as the right?*

Answer. By reason of the great heate of the hart, and for the hot blowing of the same, for that it is which maketh a man as nimble of the left hand as in the right: and without doubt such are of a good complexion.

Question. *Why are not women ambidexters as well as men, as Hippocrate saith, vlt. pars. Aphorif.*

Answer. Bicause as *Galen* saith, a woman in health which is most hot, is colder then the coldest man in health: I say in health, for if she haue an ague, she is accidentally hotter then a man.

THE PROBLEMES

Question. *Why are the fingers full of ioints?*

Answer. To be the more fit & apt to receiue, and to keepe the thing receiued.

Question. *Why hath euery finger three ioints, and the thumbe but two?*

Answer. The thumbe hath three, but the third is ioined vnto the arme, and therefore is stronger than the other fingers, and is bigger in strength, seeing he is also in quantitie, and is called *pollex à polleo*, that is, to excell in strength.

Question. *Why are the fingers of the right hand more nimble, than the fingers of the left, as Aegidius saith?*

Answer. It proceedeth of the heate which doth pre-dominate in those parts, which causeth greater agilitie.

Question. *Why are the fingers thicker before meate, than after, as Albertus saith?*

Answer. According vnto the Phisitions, bicause a man which is fasting is full of bad humors, and diuers fumosities, which pufte vp the parts of the body, and the fingers also: but when those humors are expelled through meate, the fingers become more slender. And for the same reason, a man which is fasting is heauier than when he hath meate in his belly, as it is most plain in fasters. Another reason may be given, that is, bicause that after meate, the heat departeth from the outward parts of the body vnto the inward, to helpe digestion, and therefore the outward and externall parts become slender: but after the digestion is made, the blood returneth againe to the exterior parts, and then they become great againe.

Question. *Why are some men left handed?*

Answer. Bicause the hart sendeth not heate vnto the right side, but more vnto the left, and doth also worke a slendernes and subtiltie in the left side.

OF ARISTOTLE.

Of the nailes.

Question. *From whence do the nailes proceede?*

Answer. Of fumosities and humors which are resolued, and do go into the extremities of the fingers, & there are dried through the power of the externall aire, and brought to the hardnes of a horne.

Question. *Why do the nailes of old men growe blacke and pale?*

Answer. Bicause the heate of their hart decaieth, the which decaying, their beautie doth decay also.

Question. *Why are men iudged to be of a good or euill complexion, by the disposition of their nailes?*

Answer. Bicause they giue witnes of the goodnes or badnes of the hart, and therefore of the complexion: for if they bee somewhat red, they betoken choler well tempered: but if they be inclining with red somewhat to blacknes, they betoken a sanguine complexion: but if they be yellowish or blacke, they signifie melancholy.

Question. *Why do white spots appeere in the nailes?*

Answer. Through the mixture of flegme with the nutriment.

Of the breast.

Question. *Why is the breast hollow?*

Answer. Bicause there is the seate of the spirituall and aëreous members, which are most noble, as the hart and lights, and therefore bicause these might be kept from hurt, it was necessarie that the breast should be hollow.

Question. *Why hath a man the broadest breast of all liuing creatures?*

Answer.

THE PROBLEMES

Answer. Bicause the spirits of man are weake and subtile, and therefore do require a spacious place, wherein they may be contained, as the breast is.

Question. Why are the breasts of birds round?

Answer. Bicause they be in continuall motion, and that figure is fittest for motion, as *Aristotle* doth say, 4. *Physick.*

Question. Why do we drawe those things which we loue vnto our breast?

Answer. Bicause the first and chiefeft part of the hart is vnder the breast, and therefore that which the hart doth loue we do drawe to the breast, by reason of the neighbourhood it hath with the hart, so applying the thing loued vnto the louer.

Question. Why haue women narrower breasts than men?

Answer. Bicause there is heate in men, which doth naturally moue to the vppermost part of them, making those parts great and large. And therefore a great breast is a token of courage, as *Aristotle* doth say, declaring this to be true by the Lion and the Bull: but in women colde doth predominate, which naturally doth tend downward. And therefore *Aristotle* doth say, that women do oft fall vpon their taile, bicause those parts behinde are grosse and heauie, by reason of the cold descending thither: but a man doth commonly fall on his breast, by reason of his greatnes and thickenesse.

Of the paps and dugs.

Question. Why are the paps placed vpon the breast?

Answer. Bicause the breast is the seate of the hart which is most hot, and therefore there the paps do growe, to the end that the flowers being conuaid thither, as being neere vnto the heart of the

OF ARISTOTLE.

hart, should the sooner be digested and perfected, and converted into the matter and substance of milke.

Question. Why are the paps belowe the breasts in other beasts, and above the breast in women?

Answer. Bicause a woman goeth vpright, and hath two legs onely, and therefore if hir dugs should be belowe hir breast, they would hinder hir going: but other beasts haue fower feete, and therefore they are not hindered in their going.

Question. Why haue not men as great breasts or paps as women?

Answer. Bicause a man hath no monthly tearmes, and therefore no vessell deputed for them. And yet Aristotle doth say, that men haue small paps and women little small stones.

Question. Which paps are best for children to suck, great ones, or small ones, or the meane betweene both?

Answer. In the great ones the heate is dispersed, and there is no good digestion of the milke: but in small ones the power and force is strong, bicause a vertue vnited is strongest, and by a consequent there is a good working and digesting of the milke: and therefore the small ones are better than the great ones: but yet the meane ones are the best of all, bicause that euery mean is best.

Question. Why do the paps of yoong women begin to growe great about thirteene or fouenteene yeers of age, as Albertus doth say?

Answer. Bicause that then hir tearmes begin to haue course and to increase: and as Aristotle doth say, mans seede and womens flowers do begin to increase at one age.

Question. Why do the paps of such women as cast their childre, waxe soft, as Hippocr. saith, 2. part. Aphorif.

Answer. Bicause that there the flowers haue no course

THE PROBLEMES

to the teates, by the which the yong one is nourished, but follow their ordinarie course, and therefore they waxe soft.

Question. *Why hath a woman that is with child nigh a boy, the right pap harder then the left?*

Answer. Bicause the male-childe is conceiued in the right side of the mother, as Hippoc. saith, & therefore the flowers do run to the right pap and make it hard.

Question. *Why doth it signifie weaknes in the childe, when the milke doth drop out of the pappes before she woman be deliuered?*

Answer. According vnto Aristotle, bicause the milke is the proper nouriture of the childe in the wombe of the mother, and therefore if the milke runne out it is a token that the childe is not nourished, and therefore is weake.

Question. *Why doth the hardnes of the paps betoken the health of the childe in the wombe?*

Answer. Bicause the flowers are conuerted into milke, and that milke doth sufficiently nourish the childe, and thereby his strength is signified.

Question. *Why hath a woman but two paps, and some brute beasts ten, or more?*

Answer. Bicause that for the most part a woman hath but one childe either boy or wench, and therefore one pap is sufficient or two: but beasts haue many yong ones, and therefore so many teates.

Question. *Why be womens paps hard when they be with child, and soft at other times?*

Answer. They swell then and are puffed vp, bicause that much moisture which proceedeth from their flowers doth run vnto the paps, which at other seasons do remaine in the matrix or wombe, and is expelled by the place deputed to that end.

Question. *By what meanes doth the milke of the pappes come*

OF ARISTOTLE.

come vnto the matrix or wombe ?

Answer. According vnto Hippocrates, bicause there is a certaine knitting and coupling of the pappes with the wombe, and there are certaine vaines which the Midwives do cut at the time of the birth of a childe, and by those vaines the milke doth flow vnto the nauill of the children, and so they receiue nouriture by the nauill. Some say, that the childe in the wombe is nourished at the mouth: but that is false, bicause that so he shoulde auoide excrements also: but that is false, bicause that that is not seene where.

Question. Why is it the signe of a male-childe in the wombe, when the milke which runneth out of the womans breasts is thicke, and not much, and of a female when it is thin?

Answer. Bicause that a woman which goeth with a boy hath great heat in hir, which doth perfect the milke, and make it thicke: but such as goe with a wench haue not so much heate, and therefore the milke is vndigested and vnperfited, and watery and thin, and will swim aboue water if it be put into it.

Question. Why is the milke white, seeing the flowers are red, which it is ingendred of.

Answer. Bicause that blood well purged and concocted, becommeth white, as it appeereth in flesh, whose proper colour is red, and being well boiled is white. Another answer is, bicause that euery humor which is ingendred in such a part of the body, is made like vnto that part in colour where it is ingendred, as neere as it can: but bicause the flesh of the paps is white, therefore the humor of milke is white.

Question. Why doth a Cowe giue milke more abundantly then other beasts?

Answer. Bicause a Cow is a great eating beast: and where there is much monthly superfluitie ingendred, there is much milke, bicause it is nothing els but that blood

THE PROBLEMES

blood purged and tried: and bicause a cow hath much of this monthly blood she hath much milke.

Question. Why is not milke wholesome, as Hippocrates saith, 2. part. Aphorif.

Answer. According vnto the opinion of Galen, for diuers reasons, First, bicause it doth curde in the stomacke, whereof an euill breath is bred. But to this Hippocrates giueth a remedie, saying: If the third part of it be mingled with running water, then it is not hurtfull. Another reason is, bicause that sometimes the milke doth waxe sower in the stomacke, and boile till it be dry, whereof euill humours are bred, which do infect the breath.

Question. Why is milke naught for such as haue the head-ach?

Answer. Bicause milke is easily conuerted into great fumosities, & hath much terrestriall substance in it, the which fumosities ascending, doth cause the head to ake.

Question. Why is milke a fit nutriment for children and infants?

Answer. Bicause it is their naturall and vsuall foode, and bicause they were nourished with the same in the wombe of the mother, it is fit for them.

Question. Why are white meases made of a new milch Cow good?

Answer. Bicause the milke is at that time very spongie, and doth expell many fumosities, and doth as it were purge at that time.

Question. Why is the milke naught for the childe, if the woman do vse carnall copulation?

Answer. Bicause that in the time of carnall copulation, the subtilest and best part of the milke goeth to the vessels of the seede, and vnto the wombe, and the worst remaineth in the paps, which doth hurt the childe.

Question.

OF ARISTOTLE.

Question. *Why is the milke of browne women better, than of white women?*

Answer. Bicause that browne women are hotter than others, and bicause the heate doth purge the milke sufficiently, and so the milke is the better.

Question. *Why do the Physicians forbid vs to eat milke and fish at the same meale?*

Answer. Bicause they do dispose vs to a leprosie, and bicause they are both fleugmatike.

Question. *Why haue not birds milke and paps?*

Answer. Bicause paps would hinder their flying: and fish also haue neither paps nor milke, as *Aristotle* doth say: but in fishes the female doth cast much spawn, vpon which the male doth touch with a small gut, which causeth their kinde to be infinite in succession.

Of backs.

Question. *Why haue beasts backs?*

Answer. According vnto *Aristotle*, for three causes. First, bicause the backe should bee the way and meane of the sinewes, which are extended and spread throughout all the bodie from the back bone, as it appeereth in such as are hanged, bicause that when they are torne in peeces, or without flesh, the sinewes hang whole in the chine or backe bone. The second, bicause it should bee a garde and defence for the soft parts of the body, as of the stomacke, liuer, lights, and such like. The third, bicause it should be the foundation of all the bones, bicause we see other bones, as the ribs, fastened in the backe bone.

Question. *Why hath a man aboue all creatures a broad backe, which he can lie vpon, which no beast can do?*

Answer. Bicause a broad backe doth answer a broad brest. If therefore a man should haue a sharpe back like
vnto

THE PROBLEMES

vnto other beasts, that would be of an vnseemely shape, and therefore it is requisite that he haue a broad backe.

Question. Why hath a man which lieth on his backe horrible visions?

Answer. Bicause then the passage or sinew of the fantasie is open, which is in the forepart of the braine, and so the fantasie is destroyed, and then those visions follow. Another reason is, bicause that when a man doth lie on his backe, the humors are disturbed, and moued vpward where the fantasie is, which is by that meanes disturbed.

Question. Why is it naught to lie on the backe?

Answer. Bicause, as the Physicians do say, that doth dispose a man to a leprosie, madnes, and to an *Incubus*. Where you may note, that *Mania* or madnes is the hurt or disturbance of the forepart of the braine, with a taking away or deprivation of the imagination: but *Incubus*, that is, the nightmare, is a passion of the hart, when a man doth thinke himselfe to be strangled in his sleepe, and somewhat lie heauie vpon his stomacke, which hee would put off.

Question. Why hath the backe bone many ioints and knuckles, called Spondylia by the Physicians?

Answer. For the mouing of the backe, and bowing of him, without the which ioints that could not be done. And therefore they say amisse which say that Elephants haue no such ioints: for without them hee could not moue.

Question. Why do fish die presently when their back bone is broken?

Answer. Bicause that in fish the back bone is in stead of the hart. Now the hart is the first thing which doth liue, and the last thing which doth die, as it appeereth in the booke *de longis. & breuis. vite*, and therefore when that bone is broken, fish can liue no longer.

OF ARISTOTLE.

Of the Marrow.

Question. *Why doth a man die quickly after the marrow is hurt or perished?*

Answer. Bicause the marrowe doth proceede from the braine, which is a principall part of man, as it appeereth in two reasons. First, bicause the marrowe is white like vnto the braine. Then, bicause they haue a small skin or rinde, which that which is called *Nucha* hath not, which doth somewhat differ from the marrow, bicause that *Nucha* hath two couerings like the braine, called *Pia mater*, & *Dura mater*.

Of the Piles or fluxe of blood in the fundament.

Question. *Why haue some men the piles?*

Answer. Bicause they are cold and melancholike, the which melancholie first passeth to the spleene, which is the proper seat of melancholie, and there cannot be retained through abundance of blood: and therefore from thence it is carried to the backebone, where there are certaine vaines which haue their end in the backe the which do receiue that blood. And when those vaines are very full of melancholy blood, then the waies and conduits of nature are opened, and that blood issueth out once a moneth like a womans tearmes or flowers. And those men which haue this course of blood, are kept from many infirmities, as the dropsie, plague, and such like.

Question. *Why are the Iewes subiect vnto this disease very much?*

Answer. The Diuines do say, bicause they cried at the death of Christ, *Let his blood fall vpon vs and our children*. And therefore it is said in the Psalm, *Percussit eos Deus in posteriora dorsi*. Another reason is, bicause the

THE PROBLEMES

Iewes do eate much fleugmatike and cold meats, which doth breed melancholy blood, which is purged by this fluxe of blood. Another reason is, bicause moouing doth cause heat, & heat digestion, as 4. *Meteor.* but the Iewes do not mooue nor labor, nor conuerse with men. Also they lise in great fear, lest we should reuenge the death our Sauour, which doth also breed a coldnes in them, which doth hinder digestion, which doth breed much melancholy blood in them, which is by this meanes purged.

Of the hart.

Question. *Why are the hart and the lungs, called liuely parts of the body, in Latine Spiritalia membra?*

Answer. From this worde *spiritus*, which signifieth breath, life, or soule, and bicause the vitall spirits are ingendred in the hart: but that is no good answer, for so the liuer & the braine might be so called, which is false: bicause the liuer is a part which giuerh nouriture, and the braine sence and life. And yet the consequence is cleere, bicause the vitall spirits are ingendred in the liuer, and the sensible or animal spirits in the braine. And therefore the answer is, bicause that in the hart and in the lungs breath and aire is receiued, by which we liue.

Question. *Why are the lungs thinne and spungie, light and full of small holes?*

Answer. Bicause the aire might bee the better receiued in them, for the cooling of the hart, and expelling of superfluous humours, bicause the lungs are the fanne of the hart. And as a paire of bellows is puffed vp by taking in of the aire, and shrinketh by blowing out the aire: so likewise the lights do drawe aire when they coole the hart and cast it out, least through too much
heate

OF ARISTOTLE.

heate of the aire drawn in the hart shoulde be suffocated.

Question. Why is the flesh of the lungs white?

Answer. Bicause they be in continuall motion.

Question. Why haue those beasts onely lungs which haue harts?

Answer. Bicause the lungs be no part for themselves, but for another, that is, for the hart: and therefore it were superfluous for those beasts to haue lungs which haue no hart: but nature doth neuer want in things necessarie, nor abound in superfluities.

Question. Why do such beasts which haue no lungs want a bladder?

Answer. Bicause such drinke no water, to the ende to make their meat to boile, or to helpe digestion, but onely for the tempering of their meate, and therefore they want a bladder and vrine, as it appeereth in such birds as do not drinke at all, as the Falcon, Sparrow-hawke.

Question. Why is the hart in the midst of the body?

Answer. Bicause it should impart life vnto all the parts of the bodie: and therefore is compared vnto the Sun, which is placed in the middle of the planets, to powre light vnto them all. And therefore the Pythagorians calling the Heauen a great living creature, say, that the Sunne is the hart of him.

Question. Why onely in man is the hart placed in the left side?

Answer. To the end that the heat of the hart should mitigate the coldnes of the spleene: for the spleene is the seate of melancholy, which is seated in the left side likewise.

Question. Why is the hart first ingendred? for according vnto Aristotle, the hart doth first liue and last die.

Answer. Bicause, as Aristotle saith, *de inuentute & senect.*

THE PROBLEMES

senect. the hart is the beginning and origine of life, and of all the parts of the body, and without him no part can liue. Note, according vnto the Philosophers, that of the seede retained in the matrix or wombe, there is first ingendred a certaine little small skin, which doth compassie the seed, whereof first the hart is made of the purest blood, then of a blood not so pure, the liuer, and of a thicke and colde bloode the marrowe and the braine.

Question. *Why are such beasts bold which haue but a litle hart, as the lyon?*

Answer. Bicause that in a little hart the heate is wel vnited and vehement, and the blood touching him doth quickly heat him, and is speedily carried vnto the other parts of the body, which doth giue courage and boldnes.

Question. *Why are such beasts as haue a great hart verie fearfull, as the Hare?*

Answer. Bicause the heat is dispersed in such a one, and is not able to heate the blood which commeth to him, and so feare is bred.

Question. *Why is the hart continually mooued?*

Answer. According vnto *Aristot.* *de motu cordis*, and *Galen*, bicause that in him there is bred a certaine spirite which is more subtile then the aire, which by reason of his great thinnes and rarefaction, doth seeke a larger space, filling the hollow roome of the hart, whereof the dilating and opening of the hart doth followe. And bicause the hart is earthlie, that thrusting and moouing ceasing, his parts are at rest, and tend downwards. And *Galen* giueth an experiment of an acorn, the which if it be put into the fire, the heate doth dissolue his humiditie into smoake, which is thinner and greater then the humiditie, and therefore doth occupie a greater place, and so cannot abide in the rinde, but doth puffe
it

OF ARISTOTLE.

it vp, and cause it to fall into the fire. The like is of the hart: and therefore note that the hart of a living creature is triangular after a sort, and hath the least part towards the left side, and the greatest towards the right, and doth alwaies open and shut in the least part, and by that meanes is in continuall moouing. The first moouing is called of the Phisitions *Diaſtole*, that is, the extending of the breast or hart. The second, *Siftole*, that is, the shutting of the hart, and of these two moouings all the moouings of the bodie do proceede, & the mouing of the pulse which the phisitions do feele.

Question. Why are great beasts leane?

Answer. Because the naturall heate proceeding from the hart, doth consume the watrish humiditie, which should be conuered into fat. And for the most parte women are fatter then men, because they haue much humiditie in them, and haue a moister hart then men.

Question. Why is the flesh of the hart so compact and thicke together?

Answer. Because that in a thicke compacted substance, heate is strongly receiued and vnited, as it appeereth in other things. And because the hart with his heate should moderate the coldnes of the braine, it is made of that fast flesh apt to keepe a strong hear.

Question. Why is the hart the hottest part in all liuing creatures?

Answer. Because it is so compacted, it receiueth heat best, and because it should mitigate the coldnes of the braine, as is said.

Question. Why is the hart the beginning of life?

Answer. Because that in him the vitall spirit is bred, which is the seate of life. And therefore according vnto the opinion of *August. de different. spirit. & anime*, the hart hath two bellies or receptacles, that is, the right

THE PROBLEMES

and the left: the right hath more blood then spirit, the which spirit is ingendred to giue life, and to viuificat all the body.

Question. Why is the hart round, and of the figure of a pyramide, long and sharpe?

Answer. The round figure hath no angles, and therefore the hart is round, for feare least any noisome and hurtful matter should be kept and retained in him. And also, as *Aristotle* doth affirme, bicause the round figure is fittest for motion.

Question. Why is the blood principally in the hart about all other parts?

Answer. Bicause the blood is in the hart as in his proper place, or in his efficient place, which some doe attribute vnto the liuer. And thereupon the hart doth not receiue blood of any other part, but other parts of him.

Question. Why do some beasts want a hart?

Answer. Although they haue no hart, yet they haue somewhat which doth answere vnto the hart, as it doth appeere in fish, and eeles, which haue the backe bone in steed of the hart.

Question. Why doth the hart beate and line in some beasts when the head is off, as it appeereth in birds and in hens?

Answer. Bicause the vitall spirits do remaine longest in the hart, bicause the hart is that which is first aliue & last dead, as *Aristotle* doth say, and therefore the hart doth beat more then other parts.

Question. Why do all beasts which want a hart, or somewhat proportionable vnto it, want blood also, as it appeereth in flies?

Answer. The hart is the beginning of blood, and therefore the cause failing the effect doth faile.

Question. Why is the pulse of the hart more certainly iudged in the right side then in the left?

Answer.

OF ARISTOTLE.

Answer. Bicause the heate of the hart is more liuely there then in the other side, and therefore it is better felt there, then in the other side.

Question. *Why doth the heate of the hart faile sometimes on a sudden, as in those which haue the falling sicknes?*

Answer. This doth proceede according vnto Constant, through the defect of the hart it selfe, and of certaine small skinnes with the which it is couered, the which being infected or corrupted, the hart faileth on a sudden: and sometime it doth happen by reason of the parts next adioining. And therefore when any venemous humor doth go out of the mouth of the stomack, that doth hurt the hart, and the parts adioining, the which doth also cause this fainting. Note according vnto Aristotle, that the disposition of the hart is knowne by the pulse of the hart, bicause a swift great bearing pulse, doth giue witnes of the heat of the hart and of a good complexion. A slow and weake pulse doth betoken the coldnes of the hart and an euill complexion. And therefore a woman which is in health hath a slower and weaker pulse then a man, as it shall appeere heereafter.

Of the stomacke.

Question. **V***Why is the stomacke large and wide?*

Answer. Bicause that in the stomacke the meate is first concocted and digested, as it were in a potte, to the ende that that which is pure should be separated from that which is impure, as Aristotle saith: and therefore according vnto the quantitie of meat the stomacke is enlarged.

Question. *Why is the stomacke round?*

Answer. Bicause that if it had angles and corners, as Constant saith, the meate would remaine in them and breede euill humours, and a man shoulde neuer want

THE PROBLEMES

agues: the which humors neuerthelesse are euacuated, lifted vp and consumed, & are not hidden in any such corners, by reason of the roundnes of the stomacke.

Question. Why is the stomacke full of sinewes and feeling?

Answer. As Aristotle doth say, bicause the sinewes can be extended and enlarged, and so the stomacke is when it is full, and when it is hungrie it is drawne together, & therefore nature hath provided those sinewes.

Question. Why doth the stomacke digest?

Answer. By reason of the heate which is in him, the which heat commeth from the parts adioining, that is, the liuer and the hart. For we see that in metals the heat of the fire doth take away the rust and drossie from the iron, and siluer from tinne, and gold from copper: and so by digestion the pure is separated from the impure. And that digestion is of foure sorts, according vnto the Phisitions.

Question. Why is the stomacke ioined vnto the liuer?

Answer. Bicause, saith Bonst. the liuer is verie hot, & with his heat doth helpe digestion, and doth compasse the stomacke.

Question. Why be we commonly colder after dinner then before?

Answer. Bicause that then all the heat goeth to the stomacke to further digestion, and so the outward parts be cold, being deprivied of heat.

Question. Why is it hurtfull to studie presently after dinner?

Answer. Bicause that when the heat doth labour to helpe the imagination in studie, then it ceaseth from digesting the meate, and so the meate remaineth raw. And therefore according vnto the Phisitions a man should walke somewhat after dinner.

Question. Why have women with childe an vnordinate appetite

OF ARISTOTLE.

appetite of eating coales, ashes, and such like?

Answer. Bicause that such as are the humours in the stomacke, such nutriment they desire: and bicause women with childe haue corrupted humors, they desire such things, bicause like doth coner his like.

Question. *Why doth the stomacke slowly digest very fat meate?*

Answer. Bicause such meates do swimme in the stomacke. Now the best digestion is in the bottome of the stomach, where fat meate commeth not. And therefore such as eate fat meate are verie sleepeie after the eating of it, bicause their digestion is hindered.

Question. *Why is all the bodie the woorse when the stomacke is ill at ease?*

Answer. Bicause the stomach is knit with the braine, hart and liuer, which are the principall parts in man, and therefore when he is not well, the others are euilly disposed. Another answer is, that if the first digestion be hindered; the others are also hindered: for in the first digestion is the beginning of the infirmitie that is in the stomach.

Question. *Why are yoong men sooner hungred than old men?*

Answer. Yoong men do digest for thre causes. First for growing: then for restoring of life: and lastly, for conseruation of their life, as Hippocrates and Galen doth say. Else we answer, that yoong men are hotter than olde men, bicause yoong men are hot and drie, and therefore the heate doth digest more, and by a consequent they desire more.

Question. *Why do Phisitions prescribe that a man should eate when he hath an appetite?*

Answer. Bicause much hunger and emptines doth fill the stomacke with naughtie rotten humors, which he doth draw vnto himselfe in neede of meate: which
doth

THE PROBLEMES

doth easily appeere, bicause that if we fast ouer night, we haue an appetite to meat, but in the morning none. That is therefore a token that the stomacke is filled with naughtie humors, and especially his mouth, which is no true filling, but a deccitfull. And therefore after we haue eaten a little, our stomack commeth to vs againe. And then the prouerbe is, that one morsell draweth another : for the first morsell hauing made cleane the mouth of the stomacke, doth prouoke appetite.

Question. Why do the Phisitions prescribe, that we should not eat too much at a time, but by little and little?

Answer. Bicause that when the stomacke is full, the meate doth swim in him, which is a dangerous thing. Another reason is, that as very greene wood doth put out the fire, so doth much meate choke the naturall heate and put it out. And therefore the best phisicke is to vse temperancie in eating and drinking.

Question. Why do we desire change of meates, according vnto the change of times? as in winter, beefe, porke, mutton : in summer, lighter meates, as veale, lambe?

Answer. Bicause the complexion of the bodie is altered and changed, according vnto the time of the yeere. Another answer is, that this doth proceede from the qualitie of the season, bicause that the colde of the winter doth cause a better digestion, bicause the stomacke and belly is hotter in winter, by reason of the compassing cold, as Hippocrates and Aristotle doth teach.

Question. Why should not the meate we eat be too hot, as Pepper, Ginger?

Answer. Bicause that hot meate doth burne the blood, and doth dispose vnto a leprosie. So contrariwise, meate too cold doth mortifie and congeale the blood. Also our meate should not bee over sharpe, bicause it procureth oldeage : and ouer much sauce doth burne
the

OF ARISTOTLE.

the intrailles, and procureth often drinking, as rawe meate doth: and ouer sweete meates do constipate and clinge the vaines together.

Question. Why is it a good custome to eat cheese after dinner, and peares after all meate?

Answer. Bicause that cheese, by reason of his earthlinesse and thicknesse, renderth downe toward the bottome of the stomacke, and so putteth downe the meate: and the like is of peares. Note that new cheese is better than olde, and olde drie salt cheese is very naught, and procureth the head-ach and stopping of the liuer, and the older the woorsen. Whereupon it is said, that cheese is naught, and digesteth all things but it selfe.

Question. Why be nuts good after fish: as the verse is:

After fish nuts: after flesh cheese.

Answer. Bicause fish is of a hard digestion, and doth easily putrefie and corrupt, and nuts doe helpe digestion, bicause they are somewhat hot. And fish is poyson at some times, and nuts are a remedie against poison. And note that the fish should be of a cleere stonie water, and not of a cold standing muddie water, and should be sod in wine with parfly, and so it doth least hurt.

Question. Why is it vnwholsome to stay long for one dish after another, and eat of diuers kindes of meates?

Answer. Because the first meate beginneth to digest when the last is eaten, & so the digestion is not equally made, and therefore the meate digested beginneth to corrupt. But yet this rule is to be noted touching the order of meates, that if there be many dishes, whereof some are light in digestion, as chickens, kid, veale, soft eggs, and such like, these meates should be first eaten: but the grosse meates, as venison, bacon, heefe, roasted porke, hard eggs, and fried eggs, should bee eaten last.

And

THE PROBLEMES

And the reason is, because that if they should be first serued and eaten, if they were digested, they would hinder the digestion of the others: and the light meates not digested, should be corrupted in the stomacke, and be kept in the stomach violently. Whereof there would follow belching, loathing, head-ach, belly-ach, and great thirst. And by a consequent it is very hurtfull too at the same meale, to eat milke, and drinke wine, because they dispose a man to a leprosie.

Question. Which is better for the stomach meate or drinke?

Answer. Drinke is sooner digested than meate, because meate is of greater substance and more materiall than drinke, and therefore meate is harder to digest.

Question. Why is it good to drinke at dinner?

Answer. Because the drinke should make the meate readier to digest. For if a pot be filled with flesh or fish without liquor, then both the meate and the pot is marred. And the stomach is like vnto a pot which doth boile meate: and therefore the Physicians do giue counsell to drinke at meales.

Question. Why is it good to forbear a late supper?

Answer. Because there is no moouing nor stirring after supper, and so the meate is not sent downe to the bottome of the stomacke, but remaineth vndigested, and so breedeth hurt. And therefore a light and short supper is best, as the old verse doth shew.

Question. Why is it naught to drinke wine fasting?

Answer. Because it doth greatly endanger the braine, and breedeth the falling sicknes, and the apoplexie.

Question. Why is it hurtfull to drinke much cold water?

Answer. Because one contrarie doth expell and hinder another: but the water is very cold, and therefore coming vnto the stomach doth hinder digestion, and the heate which doth digest.

Question. Why is it vnwholesome to drinke new wine, and why

OF ARISTOTLE.

Why doth it hurt the stomacke very much?

Answer. Bicause it cannot be digested: and therefore it doth cause the belly to swell, and so it doth in some sort cause a bloodie fluxe: it doth also hinder making of water: but to drinke good wine is wholesome.

Question. Why do the Physicians forbid vs to labour presently after dinner?

Answer. For three causes. First, bicause mooving doth hurt the vertue and power of digestion, and by that meanes the meate is expelled vndigested. The second is, bicause stirring immediately after dinner doth cause the parts of the bodie to drawe the meate raw vnto them, which doth breede sicknes. The third, bicause mooving doth cause the meate to descend before it be digested: but after supper it is good to stirre and moue, bicause we sleepe not long after. And therefore we should walke a little, bicause the meate may go to the bottome of the stomacke.

Question. Why is it good to walke in the morning before dinner?

Answer. Bicause it maketh a man well disposed, and doth fortifie and strengthen the naturall heate, and causeth the superfluitie of the stomack to descend. And therefore *Anicen* doth say, that such as forgo this exercise, do fall into the inflammation of the hart.

Question. Why is it wholesome to vomite, as diuers say?

Answer. Bicause it doth purge the stomacke of all naughtie humors: for it doth expell Greene and blew humors, which would breede agues, if they should remaine in the stomacke. And according vnto *Anicen*, a vomite doth purge the eyes, the head, and make the braine cleane.

Question. Why doth sleepe greatly strengthen the stomacke, and the digestive vertue?

Answer. Bicause that in sleepe the heate doth drawe inward,

THE PROBLEMES

inward, and doth helpe the digestion: but when we be awake, the heate doth remaine about the senses, and is dispersed throughout all the body.

Question. *Why do some men in some diseases, voide their meate downward, in the same qualitie and quantitie, as they did receiue it into the stomacke?*

Answer. By reason of the weakenes of the naturall vertue of the appetitiue power, attractiue, digestiue, re-sentiue, and expulsiue, which disease is called *Lienteria*.

Of the blood.

Question. *Why is it necessarie, that euery liuing thing which hath blood, haue also a liuer?*

Answer. According vnto *Aristotle*, bicause the blood is first made in the liuer, bicause the liuer is the seate of the blood, according vnto other Philosophers, & is drawn from the stomacke by certaine principall vaines, and so ingendred.

Question. *Why is the blood red?*

Answer. Bicause it is like vnto the part in which it is made, that is, vnto the liuer, which is of a red colour. And the blood is also sweete, bicause it is well digested and concocted: but if it haue a little earthly matter mixed with it, it is a cause that it is somewhat salt, as it appeereth in *Aristos. lib. meteor.*

Question. *Why haue women thicker blood than men?*

Answer. By reason of the cold which doth thicken, binde, and congeale, and ioine together.

Question. *Why doth the blood come to all the parts of the bodie from the liuer, and by what meanes?*

Answer. By the meanes of the principall vaines, as the vaines of the head, of the liuer, and such other, and to nourish all the bodie.

OF

OF ARISTOTLE.

Of vrine.

Question. **H**ow doth the vrine come vnto the bladder, seeing the bladder is shut?

Answer. Some say by sweating, and it seemeth to be true: but some say, that it commeth by a small skin which is in the bladder, which doth open and let in the vrine. *Theophilactus* doth say, that the vrine is a certaine and not a deceitfull messenger of the health and infirmitie of man. And *Hippocrates* doth say, that men haue white vrine in the morning, and before dinner red, and after dinner pale, and likewise after supper: for there are diuers colours of the vrine, whereof we will not speake at this present.

Question. *Why doth the dropsie proceede from the liuer?*

Answer. Bicause that (saith *Const.*) the digestiue power in the liuer, cannot conuert the thicke substance into the fower humors, but is conuerted onely into water, the which doth swell and puffed vp a man, and especially the belly.

Of the gall.

Question. **VV**hy haue liuing creatures a gall?

Answer. Bicause that cholerike humors are receiued in it, the which through their sharpnes do helpe the guts to expell superfluities, it doth also helpe the stomacke in digesting.

Question. *Why doth the jaundise proceede from the gall?*

Answer. Bicause the humor of the gall is blewish and yellow: and therefore when the pores of the gall are stopped, then that humor cannot go into the sacke or bladder of the gall, but is mingled with the blood, wandering throughout all the bodie, and infecting the skin.

Question. *Why haue not a Horse, a Mule, an Asse, and a Swine a gall?*

Answer.

THE PROBLEMES

Answer. Aristotle saith, that although those beasts haue no gall in one place, as in a purse or vessell, yet they haue a gall dispersed by some small vaines.

Of the spleene.

Question. Why is the spleene blacke flesh?

Answer. Bicause it is caused of a terrestriall and earthly matter, that is, of a blacke substance, as Aristotle doth say. Now the effect is like vnto the cause. Another answer is according vnto the Physicians, bicause the spleene is the receptacle of melancholic, and melancholic is of a blacke colour.

Question. Why is a man leane which hath a great spleene?

Answer. Bicause the spleene doth drawe much matter vnto himselfe, which should go into fat. And therefore contrariwise, men which haue but a small spleene are fat.

Question. Why doth the spleene cause men to laugh as Isidorus doth say; we laugh with the spleene, we be angrie with the gall, we are wise with the hart, we loue with the liuer, and we feele with the braine, and speake with the lungs: that is, the cause of laughing, anger, loue, wisdom, and speech, and feeling, doth proceede from the spleene, the gall, the liuer, the hart, the lungs, and the braine?

Answer. The reason is, bicause the spleene doth draw much melancholic vnto it, bicause it is his proper seate, the which melancholic is cause of sadness, and is there consumed, and so the cause failing, the effect faileth. And that melancholic is cause of sadness, it appeereth in Aristotle in *Proem. de anima*. and therefore that being consumed in the spleene, the contrarie vnto sadness doth follow, that is, ioy and gladnes. And for the same cause the gall causeth anger: for cholerike men are angrie, bicause they haue much gall. For the better vnderstanding

OF ARISTOTLE.

standing of this, note that there bee foure humours in man, that is, blood, choler, fleume and melancholy: wherof each hath a speciall receptacle and place where it is receiued and kept. Of a drie and hot substance choler is ingendred, which goeth vnto the gall, as to his seate and place. But of a cold and drie humour melancholy is ingendred, which runneth to the spleene as to his peculiar place and receptacle. But of a cold and moist humour fleume is bred, which goeth vnto the lungs, as vnto his receptacle, or as the Phisitions doe say, vnto the spleene. But the blood which is the most noblest humour, is ingendred in the liuer, and there his proper place doth seeme to be.

Of carnall copulation.

Question. *Why do liuing creatures vse carnall copulation?*

Answer. Bicause it is the most naturall worke which is in liuing creatures, to beget the like vnto themselves in kinde, to continue the kinde. For if carnall copulation were not, all kinde of liuing creatures had before this time perished.

Question. *What is this carnall copulation?*

Answer. It is a mutuall action of the male and female, with instruments ordained and deputed for that act, to maintaine the kinde. And therefore the diuines do say, that it is a sin to vse that act for any end, but for begetting his like in kinde.

Question. *Why is this action good in those to whom it is lawfull, if it be moderately taken?*

Answer. Bicause that according vnto *Anicen* and *Const.* it doth ease & lighten the body, cheere the minde, comfort the head and the sence, take away many griefes of melancholy, bicause it doth expell the fume of

THE PROBLEMES

the seed from the braine, and it doth expell the matter of impostume. And therefore sometimes, through the intermitting of this act, the darkenes of the sight doth insue, and a giddines in the head. And therefore the seed of a man retained aboue a due time, is conuerted into some infectious humour.

Question. Why is immoderate carnall copulation hurtfull?

Answer. Bicause it doth destroy the sight, and drie the bodie: bicause that as *Aristotle* saith, *2. de gen. anim.* lecherie and incontinenzie is the wasting of the pure humiditie, and doth consume the braine: and it breedeth sharpe feuers, as *Auicen* teacheth, and as experience doth shew. And doth shorten the life of man, as *Aristotle* saith, *de longis. & breuis. vite.* And *Albertus* doth shew this in the sparrow, which by reason of his often coupling, doth liue but three yeeres.

Question. Why doth carnall copulation perie much hurt some melancholy men, and cholericke men, and generally to leane men?

Answer. Bicause it doth drie the bones very much, which are drie of themselues. And contrariwise, it is good for the fleugmatike and sanguine, as *Auicen* saith, bicause they abound with that substance, which by nature is necessarily expelled. Although *Aristotle* doth affirme; that euery fat creature hath but small store of seede, bicause the substance of it doth turne into fagnes.

Question. Why do not the female of brute beasts couet carnall coupling, after they be great with yong?

Answer. Bicause that then the wombe or matrix is shut, and the flowers cease, and therefore the desire vnto the act doth cease.

Question. Why should not this act be vsed when the bodie is full?

Answer.

OF ARISTOTLE.

Answer. Bicause it doth hinder digestion, as *Aristotle* saith: likewise it is not good for a hungry belly, bicause it doth weaken him.

Question. *Why is it not good after a bath?*

Answer. Bicause that then the pores are open, and the heat dispersed throughout all the bodie: and therefore carnall copulation following a bath, doth coole the body very much.

Question. *Why is it not good after a vomise, or a loosenes of the belly?*

Answer. Bicause it is very perilous to purge twise in one day, as *Hippocrates* and *Galen* say: but so it is of this act of carnalitie, and loosenes in the belly, bicause by this act the raines & kidneis are purged and the guts by the vomite.

Question. *Why are wild beasts furious when they couple, as it doth appeere in Harts which bray, and Asses which are then almost mad, as Hippoc. saith?*

Answer. Bicause their bloode is kindled with the desire of carnall act, and nature also doth labour to expell superfluities in them, which in the sence do dispose vnto anger and madnes: and therefore after the act done they are tame and gentle.

Question. *Why is there such delight in the act of uenery?*

Answer. Bicause this act is a base and contemptible thing in it selfe, naught and vncleane, so farre that all beasts would naturally abhorre it, if there should be no pleasure in it, and so there should neuer be any carnall copulation, by reason of the vncleannes of it. And therefore in this delight nature doth willingly practise it, to the end that the kinds of liuing things should be maintained and kept.

Question. *Why doe such as vse it oft, take lesser delight in it, then such which come to it seldome?*

Answer. For three causes. First, bicause the passage,

THE PROBLEMES

of the seede is ouer large and wide, and therefore the seede maketh no stay there, by which stay the delight is had. The second, bicause that through often going together, there is but little seede left, and therefore giueth no delight. The third, bicause that such in steed of seede cast out bloode vndigested and rawe, or some other waterie substance, which is not hot, and therefore causeth no delight.

Question. Whether can this carnall copulation bee done by the mouth, so that beasts may conceiue thereby, as some do say of pigeons, which they say by kissing do this act at the mouth and conceiue. And some say this to be true in the Weesell or ermine?

Answer. According vnto *Aristotle*, that is vnture. For although pigeons doe play by the beake, yet they doe not couple together this way nor conceiue. And bicause the weesell doth beare his yong ones from place to place in his mouth they are of that opinion. And therefore *Aristotle* doth shew it thus: Whatsoeuer goeth in at the mouth, that is consumed by digestion: but if the seede should go in at the mouth, then it should also be consumed by digestion. The maior is plaine, nor is no easie instance, and the conclusion dooth holde in *Darij*.

Of the seed of man or beast.

Question. Whereof commeth the seed of man?

Answer. There are diuers opinions of Philosophers and Phisitions in this point: Some say that it is a superfluous humour of the fourth digestion. And some say that the seede is pure blood, flowing from the braine, concocted and made white in the stones. And some say that it is the superfluitie of the second or third digestion. But bicause sweate, vrine, spittle,

OF ARISTOTLE.

spittle, fleume and choler are the like, *Aristotle* saith, that the seede is alwaies the superfluitie of the last nutriment, that is, of blood dispersed throughout all the body: but yet principally it commeth from the principall parts, that is, from the hart, liuer, and braine. And an argument of this is, bicause that those parts are greatly weakned in the casting out of seed: and thereof it doth appeere, that carnall copulation is not profitable nor good. But some thinke this to be true by ouer vehement practise in this act: for otherwise moderately taken it is good and wholesome, for the lightening and easing of the body, as is said before.

Question. Why is the seede of a man white, and the seede of a woman red?

Answer. It is white in man, by reason of his great heate, and bicause it is digested better, and made white in the stones, the flesh of which is white, as the flesh of the paps. But the seed of a woman is red, bicause it is the superfluitie of the second digestion, which is done in the liuer, which is red. Or els we may say, that it is bicause the flowers are corrupt vndigested blood, and therefore it hath the colour of blood.

Question. Whesher doth the seede of man come from the parts of the body, or from the humours?

Answer. As some say, from the parts of the body: & that we proue, bicause we see that a lame man doth beget a lame childe, and a father which hath a skarre, a child which hath a skar, as *Aristotle* reporteth, *lib. de animal.* which could not be if the seed did not fall from the parts of the body. But some say that it commeth from the humors, bicause it is made of the last nutriment, & the nutriment is no part but a humor. But as for the lamenes & skar, that proceedeth from the imagination of the mother at the time of carnall copulation, as *Aristotle* saith, *2. de generat. animal.*

THE PROBLEMES

Question. *Wherefore doth the imagination of the mother, which imagineth of an Aethiopian or Blackamoore, cause the mother to bring forth a black child: As Albertus Magnus reporteth of a Queene, who in the act of carnall copulation, imagined of a Blackamoore which was painted before hir, & so brought forth a Blackamoore?*

Answer. *Auicenna* saith, that an imagination of a fall, maketh a man fall, and the imagination of a leprosie maketh a man a leaper. And so in this purpose the imagination is about the forming power, and therefore the childe borne followeth the imagination, and not the power of forming and shaping, because it is weaker then the other.

Question. *Whether doth the seede of the man enter into the substance and matter of the child?*

Answer. The seede of the father and the mother doth goe into the substance of the childe in the wombe: because that as creame doth goe into the substance of cheese, so the seed of man into the fruite in the wombe like vnto the creame, and the flowers of the woman doth enter in like vnto the milke. But this opinion doth not seeme to be of force. And therefore according vnto *Aristotle*, and other Philosophers, we say that the seed doth not goe into the substance of the childe: and it is prooued thus, because that so the matter and the efficient cause should be all one, which is against the Philosopher. The consequence is good, because the seede is the efficient beginning of the childe, as the builder is the efficient cause of the house, and therefore is not the materiall cause of the childe. It is prooued another way, because there is the selfe same materiall cause of nourishment and generation, 2. *de anim.* because wee haue our being and our nourishment of the same matter: but the seede cannot bee the materiall cause of nourishment, according vnto *Auerrois*, & therefore not
of

OF ARISTOTLE.

of being. But in truth this it is, both the seedes are shue and kept in the wombe: but the seede of the man doth dispose and prepare the seed of the woman to receiue the forme, perfection or soule, the which being done, it is conuerted into humiditie, and is fumed and breathed out by the pores of the matrix, which is manifest, bicause onely the flowers of the woman are the materiall cause of the yong one.

Question. *Why doth the matrix or wombe of a woman draw greedily the seede of man? for as Auerrois doth say, there was a maide in a hash, where some seede had beene cast, she which the maide drawing, did conceiue with childe, and was deliuered?*

Answer. *Auerrois doth say, that the wombe and nature do draw the seed, as the Lodestone doth iron, and the Agathe Steele: but she doth draw it for the perfection of hir selfe.*

Of womens monthly termes.

Question. *Why haue women monthly searmes or flowers?*

Answer. Bicause they are colde in respect of men: and bicause all their nourishment cannot be conuerted into blood, a great part of it is turned into their flowers, the which in euery moneth in euery woman are expelled, I say of euery woman which is in health, and of a certaine age, that is, after thirteene yeeres: for before they run not though she be in health, and some diseased women haue them not.

Question. *Why do they run from women?*

Answer. Bicause it is an infectious matter: for as *Aristotle* doth saye, if that substance being yong and flowing do touch a tree, or a greene bough of a tree, the tree doth die and not prosper: yea, *Aristotle* doth say, that

THE PROBLEMES

that if a dog should taste of it, he would run mad in three daies. And therefore nature would expell it euery moneth, as being an enimie vnto life. And if women doe detaine it aboute their due time, according vnto *Aristotle*, it doth breede great infirmities and diseases, as swooning.

Question. Why do they not run before thirteene yeeres of age?

Answer. Bicause yong women be hot, and so doe digest all their nourishment: and therefore they are not bred in them before that age, nor expelled, vnlesse the goodnes or naughtinesse of their complexion doe hinder it.

Question. Why haue not women them after fiftie yeeres of age?

Answer. Some answer, that olde women be barren, and therefore they cease. But a better answer is, that then nature is weake in them, and therefore they cannot expell them, by reason of ouer much weaknes. And therefore there is great store of immundities bred in them in one whole lumpe, and they are by that meanes so infectious, that they infect men with their breath, and then the cough and other infirmities come vpon them. And therefore according vnto the counsell of the Philosophers, then men should abstaine from them.

Question. Why do not such women corrupt and infect themselves?

Answer. Bicause poison doth not worke vpon it selfe, but vpon some other obiect: or else it doth not hurt themselves, bicause it is their nature. *Alberus* reporteth of a certaine maide which was brought vnto him in *Colen*, which did eate spiders, which did hir no hurt at all, but were good meate vnto hir. And *Aristotle* in his booke of the gouernment of Princes to *Alexander*, reporteth of a maide which in hir youth was nourished with

OF ARISTOTLE.

with poison. And some men haue done the like.

Question. Why haue not women with childe the flowers?

Answer. Bicause that then the flowers turne into milke, and into the nourishment of the childe: for if a woman with childe haue them, it is a signe of miscarying with hir childe.

Question. Why do they run the first three moneths in women with childe.

Answer. By reason of the smalnes of the child, which cannot take all that matter and substance.

Question. Why haue not the female of brute beasts, as of fowle and fish, their flowers?

Answer. Bicause as *Aristotles* and *Albertus* do say, in beasts which go with feete, the flowers turne into haire, in fish into their scales, in birds into their feathers. And therefore in beastes you may note that the female is more hairie than the male, and the female of fishes fuller of scales, and the female of birds fuller of feathers.

Question. Why do the flowers receiue their name Menstrua, of this word Mensis a moneth?

Answer. Bicause it is a space of time which doth measure the Moone, bicause the Moone doth end hir course in 29. daies and 14. howers. Now the Moone hath dominion ouer moist things, and bicause the flowers are an humiditie, they take their denomination of the moneth, and are called monethly termes: for moist things do increase as the Moone doth increase, and decrease as she doth decrease.

Question. Why do they run longer time in some, than in other some: as in some fixe or seuen daies, and ordinarily in all three daies?

Answer. The first are colder, and therefore they increase the more in them, and by a consequent they are the longer in expelling: and other women are more hot, and

THE PROBLEMES

and therefore they haue the fewer, and are a shorter time in expelling them.

Question. Where are the flowers kept before they run?

Answer. Some say, in the matrix or wombe. But *Auerrois* doth mislike this, and doth saye that the matrix is the place of generation, and that those flowers further generation nothing at all. And therefore he doth say, that there are certaine vaines about the back bone which doe keepe them. And a signe of this is, bicause that those women at that time haue great grieve in their backe, by reason of expelling the flowers.

Question. Whether are the flowers which are expelled, & the flowers which the child is ingendred of, all one?

Answer. No, bicause the one are vncleane, and vnfit for that purpose: but the other very pure and cleane, and therefore that blood is fit for generation.

Question. Why doe women which are gotten with childe when they haue their flowers, bring forth weake children, and leprous?

Answer. Bicause those flowers are venemous, yea a woman in hir flowers is most infectious. And so the cause doth shine in the effect, as the Philosopher doth say, the effect doth carrie a likenes of the cause, and therefore such a childe is euilly disposed of bodie.

Question. Why haue not women their flowers all at one time of the moneth, but some in the new Moone, some in the full, and some in the wane.

Answer. By reason of their diuers complexions. And although all women in respect of men be fleugmatike, yet of women among themselves, some are more sanguine than others, some more cholerike. And as euerie moneth hath his quarters, so they haue their complexions: the first is sanguine, the second cholerike. A woman which is of a sanguine complexion, hath hir flowers in the first quarter, a cholerike in the second, a melancholic

OF ARISTOTLE.

lancholy in the third, and so in the rest.

Question. Why haue such women as are of a sanguine complexion, their flowers in the first quarter?

Answer. Bicause that as Galen doth say, euery such thing added vnto such a thing, doth make it more such, and therefore the first quarter of the Moone increasing blood in a sanguine complexion, therefore shee doth then expell it.

Question. Why haue women their flowers so oft in the end of the moneth?

Answer. Bicause generally all women bee fleugmaticke, and the last quarter is fleume. Or else this doth proceede of a defect, and therefore cold doth worke then to multiplie that matter, and the matter multiplied is then expelled.

Question. Why haue women paine and grieve in the running of their flowers?

Answer. Bicause it is like vnto the paine of the strangurie, that is, making of water drop by drop. For as the strangurie, by reason that the drinke is vndigested, doth offend the subtile passage of the vrine, as it doth happen after a bath, so the flowers which are an vndigested and earthly substance, do hurt the passage by which they goe.

Question. Why doth a woman easily conceaue after hir flowers are run from hir?

Answer. Bicause she is better prepared vnto conception, as being made cleane from hir flowers.

Question. Why do women looke pale when they purge their flowers?

Answer. Bicause then the heate goeth from all the outward parts of the bodie to the inward to helpe nature, and to expell the flowers, the which depriuation of heate doth cause a palenesse in the face. Or else it is, bicause that fluxe is caused of rawe humors, the which
when

THE PROBLEMES

when they run, do make the face colourlesse, and so by a consequence cause palenesse.

*Question. Why doth a woman which hath hir flowers de-
stest hir meate?*

Answer. Bicause nature doth labour more to expell the flowers than to digest, and therefore if she should eate meate, that meate would remaine rawe, which carefull nature doth not admit.

Of barrennes.

Question. **VV***hy are some women barren and cannot
conceiue?*

Answer. According vnto the Phisitions, for diuers reasons. The first is, bicause it proceedeth sometime of the man, that is, when he is of a cold nature, bicause then his seede is vnfit for generation. The second, bicause his seede is somewhat waterish, and therefore doth not stay in the wombe. The third, bicause the seede of the man and the woman haue not the same proportion, as if the man be melancholie, and the woman sanguine: or if the man be cholerike, and the woman very fleugmatike: bicause as it is euident in Philosophie, the agent and the patient ought to haue the same proportion, otherwise the action is hindered.

*Question. Why doe fat women seldome conceiue with
childe?*

Answer. Bicause they haue a slipperie wombe, out of which the seede slippeth, and is not holden in. Or else bicause the mouth of their matrix is very strait, that the seede cannot enter in: or if it do go in, it goeth in very slowly, so that the seede doth waxe cold in the meane time, and so is vnfit for generation, and is resolved into a fleshie substance.

Question.

OF ARISTOTLE.

Question. *Why do women of a very hot complexion seldome conceiue with childe?*

Answer. Bicause that the seede receiued in them is extinguished and put out, as a little water cast into a great fire. And therefore we do see that women which do vehemently desire the flesh, seldome conceiue with childe.

Question. *Why are common women and whoores neuer with childe?*

Answer. By reason of diuers seede which doth corrupt and spill their instruments of conception: for it maketh them so slipperie, that nature cannot retaine the seede. Or else it is bicause one seede doth destroy another, and so neither is good for generation. And note out of *Albertus*, that the best remedie to helpe conception, is to take the matrix of a Hare beaten into powder, and purified in drinke, which worketh much to conception.

Of conception.

Question. *Why doe some women conceiue a male-childe?*

Answer. If the seede do fall into the right side of the matrix or wombe, then a male-childe is begotten, bicause that side is hotter than the other, and heate doth principally worke to the begetting of a male-childe. And therefore as *Albertus* doth say, if the right side of the woman doth swell, it is a signe that she goeth with a male-childe. But some do giue another reason, that is, when the seede of the father hath dominion ouer the seede of the woman, then a male-childe is begotten: if the womans do preuaile, then it is a female.

Question. *Why do some women conceiue a female-childe?*

Answer.

THE PROBLEMES

Answer. Bicause the seede is fallen vnto the left side of the matrix, which is colder than the right, by reason of the spleene ioining vnto it, which helpeth cold. And as *Albertus* doth say, when the woman after the act of copulation doth lie on the right side, it is a boy: when on the left, it is a wench: for the seede doth run to that side on which the woman doth lie, and then such a child is formed.

Question. *Why hath a woman a wombe?*

Answer. Bicause it is the proper place of generation, and is placed in the middest of the woman. For as all the immundities of a citie doe run vnto the sinke, so all their monethly tearmes run to the wombe or matrix.

Question. *Why haue some women long and slender children, and some short and thicke?*

Answer. Bicause as *Galen* and *Auerrois* doe say, the childe is formed according vnto the quantitie of the wombe. And therefore bicause some women haue a long and a narrow wombe, their children be long and slender: and some contrariwise short and large, therefore their children be short and thicke.

Question. *Why doth a woman somtime conceaue twins?*

Answer. According vnto *Galen*, bicause there are seuen cels or receptracles of seed in the wombe, and therefore a woman may naturally haue so many children at once, as there doth seede fall into those cels: for there are three in the right side, and three in the left: in the right side boies are ingendred, and in the left wenches. And in the middest of those cels or chambers, there is another, where old writers do say a Hermaphrodite is ingendred, that is, one who hath the secret parts of both sexes. And therefore if a woman should haue more than seuen children at once, it should rather be miraculoufly than naturally.

Question.

OF ARISTOTLE.

Question. *Why are twins but halfe men, and not so strong as other men?*

Answer. Bicause the seede and substance which should haue beene for one man, is diuided into two, and therefore they be weake, and in truth they do not oft liue long.

Of Hermaphrodites.

Question. *How are Hermaphrodites begotten?*

Answer. Bicause there are three principall cels in the wombe, one in the right side, another in the left, and the third in the middle, into the which when the seed doth fall, a Hermaphrodite is said to be begotten in this manner: bicause nature doth alwaies tend vnto that which is best, therefore she doth alwaies intend to beget the male, and not the female, bicause that the female is onely for the males sake, and a monster in nature. Therefore the male is sometime begotten in all principall parts, and yet through the euill disposition of the wombe, and obiekt, and inequalitye of the seede, when nature cannot perfect & end the male, she doth bring forth the female, or Hermaphrodite. And therefore the naturall Philosophers do say, that a Hermaphrodite is impotent in the priue part of man, as it doth appeere by experience.

Question. *Why doth not nature dispose in him two secretes parts of a man, or two of a woman, but one of a man and one of a woman?*

Answer. Bicause then nature should make one of them in vaine: but that is against the Philosophers, when they say, that God and nature do make nothing in vaine.

Question. *Whether is a Hermaphrodite to be reckoned for a man or for a woman?*

Answer.

THE PROBLEMES

Answer. It is to be considered in which member she is fittest for the act of carnall copulation: if he be fittest in the womans act, then it is a woman: if in the mans, he is a man.

Question. Whether should he be baptized in the name of a man, or of woman?

Answer. In the name of a man, bicause names are giuen *ad placitum*, and therefore he should be baptized according vnto the worthiest name, bicause euery man is worthier then a woman, bicause euery agent is worthier then his patient, as *Aristotle* doth say, 3. *de anima*.

Question. Whether shall he stand in iudgements in the name of a man, or of a woman?

Answer. According vnto the rule of the law, he should first sweare, before he be admitted into iudgemente, which secret part he can vse, and so is to be admitted, according vnto the vse and power of that part.

Of Monsters.

Question. **D**oeth nature make any monsters?

Answer. She doth, 2. *Phys.* for if she did not, shee should then be deprived of her ende. For of things possible she doth alwaies purpose to bring forth that which is most perfect and best: but in the ende through the euil disposition of the matter, and influence of some speciall constellation, not being able to bring foorth that which she entended, bringeth foorth that which she can. As it did happen in *Albertus* time, where in a certaine village a cow brought foorth a calfe halfe a man: then the countrey men suspecting a shepheard, would haue burned him with the cow. But *Albertus* being skilfull in *Astronomie*, said, that this did proceede from some speciall constellation, and so deliuered the shepheard from their hands.

These

OF ARISTOTLE.

These are *Albertus* words:

We saw that their two bodies were ioined in nothing but in the backe, they had two heads, foure feete, foure hands, and did go which way they lusted. And he saith, they reported vnto vs that there were two men ioined in the backe, and were of a contrarie complexion, the one furious, and the other meeke: they liued two yeers, and the one died, and the other liued long after, vntill the stinke of the other did kill him. I aske how can this be? It is answered thus: bicause the seede is cast vnto the cels or receptracles of the wombe, which seede was ynough for two children, and then by chance it doth sometime happen, that the skinne or distance betwixt the two cels or receptracles is broken, and they knitte and ioine in the backe, and haue two heads.

Question. Whether be they one or two?

Answer. *Aristotle* saith, you must looke vnto the hart, and if there bee two harts, there be two men.

Question. Why is a man borne sometime with a great head, or sixe fingers in one hand, or with saure?

Answer. *Aristotle* saith it proceedeth of superfluitie and abundance in matter: when there is too much matter, then he is borne with a great head, or sixe fingers: but if there be want of matter, then there is some part too little, or lesser then there ought to be.

Of Infants.

Question. Why are some children altogether like the father, some like the mother, some to both, and some vnto neither?

Answer. If the seede of the father do fully ouercome the seede of the mother, the child doth wholly resemble the father: but if the mothers seede predominate,

B

then

THE PROBLEMES

then he is like vnto the mother. but if he be like neither, that doth happen for many causes: sometimes through the foure first qualities: sometime through the influence of some heauenly constellation. *Alberus* giueth an example, and saith, that there was on a time a good constellation for the begetting of hogs, and a child was then begotten and brought forth which had a face like vnto a hog: and according vnto this, diuers sorts of monsters are brought forth.

Question. *Why are children oftner like the father then the mother?*

Answer. That proceedeth of the imagination of the mother, which thinketh of the disposition of the father in the act of carnall copulation. And therefore by reason of the strong imagination in the time of conception, the children get the disposition of the father. As it appeereth before of the *Queene* which had hir imagination on a *Blackamoore*: and of an *Aethiopian Queene* which brought forth a white childe, bicause her imagination was vpon a white colour. And this is scene in *Iacob* his skill in casting rodde of diuers colours into the water, when his sheepe went to ramme.

Question. *Why do children sometime resemble more their grandfathers and great grandfathers, then their parents?*

Answer. Bicause the vertue and force of the grandfather is grafted in the harts of the begetters: and it may be said, that sometime it doth proceed of the similitude of the nouriture, and then the child is formed by the similitude of the grandfathers.

Question. *Why are the parts of a childs body of diuers qualitie, and some soft?*

Answer. This proceedeth of the predomination of diuers elements, bicause that the bones are made of a terrestrial matter, and therefore are hard. But the braine
and

OF ARISTOTLE.

and the marrow are made of a more waterie matter, & therefore are more soft: but the vitall spirits and animal spirits are ingendred of a more aërious substance, and these vitall spirits are principally in the liuer and the hart.

Question. Why do children, according vnto the common course and vse of nature, come out of the mothers wombe the ninth moneth?

Answer. Bicause the child is then fully perfect, or els it is bicause some benigne planet doth raigne, as Iupiter, who is a friend vnto nature: for according vnto the Astronomers, he is hot and moist, and therefore doth temper the malice and naughtines of Saturne, which is cold and drie. And therefore for the most part children borne the ninth moneth are healthy.

Question. Why doe children borne in the eight moneths end, for the most part, die quickly? and why are they called the children of the moone?

Answer. Bicause the Moone is a colde planet which hath dominion ouer the child, and therefore doth binde the child with his coldnes, which is cause of his death.

Question. Why doth a child cry as soone as he is borne?

Answer. Bicause of the sudden change from heate to cold, which cold doth hurt his tenderne. Another reason is, bicause the childs soft & tender bodie is wringed and put togither, comming out at the narrowe and strait passage of the matrix. And especially the braine being moist, and the head pressed & wringed togither, is cause that some humours do distill by the eies, which are the cause of teares and weeping. The Diuines saie, it is for the transgression of our first fathers, and originall sinne.

Question. Why doth a childe put his finger to his mouth when he commeth first into the world?

Answer. Bicause that comming out of the wombe, he

THE PROBLEMES

commeth out of a hot bath. And therefore entring into the cold, putteth his finger to his mouth for the want of heate.

Question. How doth a child come into the world out of the wombe?

Answer. He commeth forth with the head forward: for if he should come with the thighs or arms forward, he should kill himselfe and the mother.

Of the yoong one in the wombe.

Question. How is the yoong one successufully ingendred in the wombe?

Answer. The first sixe daies the seede hath the colour of milke, but in sixe daies following a red colour, which is neere vnto the disposition of flesh, and then it is chaunged into a thicke substance of blood, curded and consistent not running, like vnto a masse of flesh: but in the twelue daies following them, this substance is made so thicke and sound, that it is able to receiue shape and forme: bicause that a fluid and running substance keepeth no impression, and so euery day receiueh some other disposition vntill his birth. And how he is gouerned euerie moneth by the planets, Boësius doth teach elsewhere.

Question. Whether doth the child in the wombe voide any excrement, or make water?

Answer. No, and the reason is, bicause he hath not the first digestion which is in the stomacke, bicause he receiueh no meate by the mouth, but it commeth to him at the nauell: and therefore he maketh not water, but doth sweate, which vrine is but little in quantitie, & is reserued in a small skin in the matrix, and at his birth is cast out in abundance.

Question. Why doth the child come out of the wombe easily

OF ARISTOTLE.

easily after seven, eight, or nine moneths?

Answer. Bicause, saith Galen, when the fruite is ripe, then the ligaments are easily broken, & so it falleth easily.

Of abortment, or vntimely birth.

Question. **W**Hy doe women which ease vnholefome meates, as rammish putrified meates, easily miscary?

Answer. Bicause it breedeth putrified seed in them, which the minde abhorring, doth cast out of the fiede of nature, that is, out of the wombe, bicause it is vnfit for the most noblest shape, that is, for mans forme & shape, which is apt to receiue the soule.

Question. Why doth wrestling and leaping cause the casting of the child, as some crasie women do of purpose?

Answer. Bicause that by such leaping, the ligaments of the child are loosed, and by a consequence there followeth abortment, bicause it can be no longer kept in the wombe.

Question. Why doth the striking of thunder or lightening cause a woman to miscarie?

Answer. Bicause that that vapour is burning, and doth easily hurt the tender substance of the child, entering in at the pores of the matrix or wombe. Yea, *Albertus* doth say, that if the childe were alieue, lightening and thunder would kill him.

Question. Why doth thunder and lightening rather cause yoong women to miscarie then old?

Answer. Bicause the bodie of yoong women are fuller of pores, and more slender, and therefore the vapour of lightening doth sooner enter into their bodie: but old women haue a thicke skin, and well compacted, and therefore the vapour cannot enter in and cause this abortment.

THE PROBLEMES

Question. *Why doth much ioy cause a woman to miscarry with hir burden?*

Answer. Bicause that in time of ioy the wombe is destitute of heate, and by a consequence miscarrying doth follow. The same reason doth cause feare to breede it, bicause then the heat runneth to the hart to helpe him and forsaketh the matrix.

Question. *Why doe women easly miscarry when they are newly with child, that is, the first, the second, & third moneth?*

Answer. Galen saith, that as apples or peares do easly fall in the beginning, bicause the knots and ligaments are soft and weake: so it is of a child in the wombe.

Question. *Wherfore is it hard to miscarry when they are gone the middle of their time, that is, three, foure, five, sixe moneths?*

Answer. Bicause that then the ligaments are stronger & fortified, and therefore are not easly broken.

Of diuers matters.

Question. *Why haue some women greater grieve then other some in childbirth?*

Answer. For three causes. Sometimes for the greatnes of the childe, or bicause the Midwife is vnskilfull. Somtime bicause the child is dead, & then boweth nor, nor cannot be bowed in going forth. And for the contrary causes, some haue lesse paine.

Question. *Why hath not a man a tayle like vnto other beasts?*

Answer. Bicause a man is a liuing creature, whose propertie is to sit: but this is proper to no other beasts which hath a taile.

Question. *Why doe such as keepe baths or hot houses, expell the heate out of the furnace better with colde water then with hot?*

Answer.

OF ARISTOTLE.

Answer. Bicause they are contrary qualities, which worke strongly the one against the other, and therefore the heat is better expelled from the stones.

Question. *Why doth hot water rather freeze then cold?*

Answer. Bicause that that water is thinner, and by a consequence giueth better entrance to the cold.

Question. *Why are men faster about the belly, then in other places?*

Answer. Bicause the greatest digestion is in the stomacke, and therefore those parts which are neereft vnto the stomack, are greatest and fastest.

Question. *Why is euery liuing creature sad after carnall copulation?*

Answer. Bicause the act is filthie and vncleane, and so euery liuing creature doth abhorre it, and when men do thinke vpon it, they are ashamed and sad.

Question. *Why cannot drunken men iudge of tastes as well as sober men?*

Answer. Bicause the flesh of the toong is full of pores, and spungie, and receiueth great moisture in it, and more in drunken men than in sober. And therefore their toong through often drinking, is full of naughtie humors, and by reason that it is so full, the instrument of taste is made thicke and grosse, bicause that taste is a vaine of the toong, a subtile thin flesh being taken away. And therefore through the thickning of the meane, that is, of taste it selfe, drinke taken of drunkards is not perfectly felt, bicause that vnto due feeling, there is requisite to haue a due proportion of the mean. And of this it is also vnderstood why drunkards haue not a perfect kind of speech.

Question. *Why haue melancholy beasts long eares, and why are not men wise for the most part, which haue long eares, but such as haue short, as Aristotle saith in lib. de animal.*

Answer. The eares do proceede of a colde and drie substance,

THE PROBLEMES

substance, which is called a gristle, which is apt to become a bone. And because melancholy beasts doe abound in this kinde of substance, therefore they haue such long eares.

Question. But why are the others halfe fooles?

Answer. Because the minds and soules do follow the bodies: for if the senses of the bodie be subtile, then the soule exerciseth subtile operation, as well actiue as speculative, and the contrarie is in a grosse body.

Question. How is the intellectuall soule ioined to the child in the wombe of the mother? whether doth the father which begetteth him, make the matter apt and fit to receiue the soule?

Answer. The answer is, as the Diuines do say, that into a matter or substance sufficiently disposed & made fit, God doth infuse the intellectuall soule. And S. Augustine saith the like: The soule in creating is infused, and in infusing is created.

Question. Why doe Hares sleepe with their eies open?

Answer. Because they haue their eies standing out, and their eie lids short, and therefore they are hardly shut. Another reason is, because they are verie fearfull beasts, and therefore for the safegard of themselves, they sleepe with their eies open.

Question. Why do not Crowes giue their yong ones meat before they be nine daies old?

Answer. Because that seeing them of another colour, they thinke that they are of another kinde, and in the meane space, almightie God doth feede them with the dew of heauen, as the Psalm doth lay: He who doth giue beasts their food, & yong crowes which call vpon him.

Question. Why are sheepe and pignons very mild beasts?

Answer. Because they want gall, & it is the gall which stirreth vnto anger.

Question. Why haue birds their stones inward?

Answer.

OF ARISTOTLE.

Answer. If they had them outward, they would hinder their flying and lightnes.

Question. Why do not birds pisse?

Answer. Bicause that that superfluitie which should be conuerted into vrine, is turned into feathers: as it appeereth bicause there is much moistnes in the feathers. Another reason is, bicause they are in continuall moouing, and therefore much moisture in them is dried vp by the aire and winde.

Question. Why are long eggs a signe and cause of the male, and the flat short eggs of the female?

Answer. Bicause that as it pleaseeth Hippocrases, it is the condition and propertie of heate, to send from the centre, to the circumference of cold. And therefore if there be any long eggs, it is a signe they haue great heate, and therefore they passe into the substance of the male: bicause that in euery kinde of thing the male is hotter than the female, as the Philosopher doth say. If the eggs be short and flat, it is a signe that the heate is small, and vndispersed, and therefore goeth into the substance of the female.

Question. Why do we heare better in the night than in the day?

Answer. Bicause, as Aristotle doth say, there is greater quietnes in the night than in the day, bicause the sunne doth not so well draw vp vapors in the night as in the day, and therefore the meane is more fit and readie, and the meane being fit, the motion is better done by him, the which is said to be done with a sound. Another reason is, bicause there are more motions of the aire and sound in the day than in the night, which do hinder one another. Also in the night there is greater silence, which is opposite vnto sound, and things opposite put one against the other, shew the better.

Question. Why doth a man laugh sooner if he be touched under

THE PROBLEMES

Under the arme pisse, than in any other part of his bodie?

Answer. Bicause there is in that place a meeting of many sinewes, and bicause the mean we touch by (which is the flesh) is more subtile there than in other parts, and therefore a better feeling. And this is true, if that place be not touched too hardly: for if you do so, then there is not that delight: and when a man is moderately and softly touched there, the spirits which are there, are dispersed and run into the face, and then from thence are cause of laughter.

Question. *Why is wood burned converted into a blacke cole, and a bone burned into a whise substance?*

Answer. Bicause the wood before it was burned was reasonable moist, and so after burning getteth heate accidentally, and that heate is not able to consume all the moisture of the wood, and therefore there remaineth some after the burning, and is converted into a black substance, bicause that the humiditie in the wood was slimie, and could not be altogether consumed by the fire. But a bone of his owne nature is cold and dry, hauing but small moisture in it, which the burning doth wholly consume, and so accidentally the moisture being consumed the bone waxeth white.

Question. *Why do some women loue white men, and some blacke?*

Answer. There are two answers: Some women haue a weake sight, and such delight in blacke, bicause the white doth hurt the sight more than blacke. The second reason is, bicause like doth delight in the like: but bicause some women are of a hot nature, such are delighted with blacke, bicause blacknes doth followe heate. And some of them are of a cold nature, and those are delighted with white, bicause cold is the mother of whitenes.

Question. *Why do lining creatures sleepe?*

Answer.

OF ARISTOTLE.

Answer. For necessitie, bicause the instruments of diuers actions are wearied he being long awake, & by rest which is in sleepe, they are comforted, as *Aristotle* saith.

Question. *Why are students readie to sleepe after dinner, if they go about to studie, and not if they solace themselves?*

Answer. Because that when a man doth applie his minde to studie, the naturall heate goeth from the outward parts of the bodie to the inward, and there is strengthened, bicause there commeth much of it together, and so causeth a fume to ascend from the meate to the head, which is the cause of sleepe. Or else we may answer, that when the power or vertue with which wee liue is strongest, the naturall power is weakened. But when a man doth solace himselfe by his pleasure, the naturall heate is spread abroad, and suffereth no vapor to ascend vnto the braine, and so he sleepeth not, but is kept from sleepe, by reason that the heate is dispersed.

Question. *Why do men willingly sleepe after labor?*

Answer. Bicause that through continuall moouing, the heate is dispersed to the externall parts of the body: the which after that the labor is past, gathereth together to the internall parts of digestion, there to digest. And from digestion vapors do rise from the hart to the braine, the which do stop the passages, by which the naturall heate should be dispersed to the externall parts: and then the externall parts being colde and thicke, by reason of the coldnes of the braine, sleepe is procured. And by this it appeereth, that such as eate much and drinke much, do sleepe much and long, bicause great store of humours and vapors are bred in such, which cannot be digested and consumed of the natural heate.

Question. *Why are such as sleepe much euill disposed, and haue an ill colour?*

Answer.

THE PROBLEMES

Answer. Bicause that in sleepe much moisture is gathered together, which cannot be consumed, which is expelled in waking: & so it doth couet to go out through the superficial parts of the bodie, and especially it couereth to the face, and so is cause of a bad colour: as it appeereth in such as be fleugmatike, who desire more sleepe than others.

Question. Why doth it appeere vnto some in their sleepe that they eate and drinke sweete things?

Answer. Bicause the fleume drawen vp to the iawes, doth distil & drop to the throte, and this fleume is after a sort sweete, and therefore that seemeth so vnto them.

Question. Why do some dreame in their sleepe that they be in the water, and drowned, and some that they be in the water and not drowned: and this doth happen especially in such as are fleugmatike?

Answer. The reason is, as *Aristotle* saith, bicause the fleugmatike substance doth run to the high parts of the bodie, and then they thinke that they are in the water and drowned, and when that substance draweth vnto the internall parts, then they thinke they escape. Another reason may bee, ouer much repletion and drunkennes: and therefore when a man is ouer much filled with meate, the fumes and vapors ascend and gather together, and therefore they thinke that they are drowned and strangled: but if they cannot ascend so high, then they seeme to escape.

Question. May any man procure a dreame by an externall cause?

Answer. *Aristotle* holdeth that it may be done. If a man do speake softly at a mans eares, and awake him, then of this stirring of the spirits, there are thundrings and buzzings in the head, and so a dreame of that. And so some men haue dreames by diuine reuelation, when it pleaseth God to send any.

Question.

OF ARISTOTLE.

Question. *How many humors be there in mans bodie?*

Answer. Fower: whereof euerie one hath his proper place in mans bodie. The first is choler, which the Phisitions do call *flaua bilis*, and is placed in the liuer. The second is melancholie, called *atra bilis*, whose seate is in the spleene. The third is fleume, whose place is in the head. The fourth is blood, whose place is in the hart.

Question. *What conditions and qualisies hath a man of a sanguine complexion?*

Answer. He is faire and beautifull, he hath his haire for the most part smooth, he is bold, he retaineth that which he hath conceiued, he is shamefast, giuen to musicke, a louer of sciences, liberall, curteous, and desireth not reuenge.

Question. *What properties do follow a fleugmasike complexion?*

Answer. They are of a dull wit, their haire neuer curle, are seldome very thirstie, they are much giuen to sleepe, they dreame of things belonging to water, they are fearfull, couetous, and giuen to heape vp riches, and are weake in the act of venerie.

Question. *What properties do follow the cholerike man?*

Answer. He is furious and angric, quarrellsome, giuen to war, pale coloured, he is vnquiet, drinketh much, sleepe little, and desireth much the companie of women.

Question. *What properties doe follow the melancholie man?*

Answer. He is swarthie, browne of complexion, his vaines hidden, he eateth little, and digesteth lesse: when he dreameth it is of darke confused things, he is sad, fearfull, exceeding couetous, and incontinent, vnlesse he bridle his affection.

Question. *What dreames do follow these complexions?*

Answer. Pleasant merrie dreames do follow the sanguine

THE PROBLEMES

guine complexion: fearefull dreames the melancholy: the cholericke dreame of chiding, fighting, and fire: and the fleugmatike of water. And this is the reason why a mans complexion is saide to be knowne by his dreames.

Question. What is the reason that if you couer an egge ouer with salt, and les him lie in it a fewe daies, all the meate within him is consumed?

Answer. The great drines of the salt doth consume the substance of the egge: but in sand some say they may be kept long, as Mariners do practise.

Question. Why is the melancholie complexion the worst of all complexions?

Answer. Bicause it is the dregs of the bloud, which is an enimie to mirth, and farthest off from the beginning of mans life, and bringeth old age and death, bicause it is dry and cold.

Question. Why are the fleugmatike for the most part dull of wit?

Answer. Bicause that as the viuacitie of wit proceedeth of heate, so of cold the contrarie, which they are subiect vnto.

Question. Whereof doth it proceede that some men die with extreme ioy, and some with extreme grieve?

Answer. Ouer great ioy doth ouer much coole the internall parts of the bodie, and ouer much grieve doth drowne and suffocate the heate, the which failing a man dieth.

Question. Why hath man so much haire on his head?

Answer. The haire of the head doth proceede of the vapors which rise from the stomacke, and ascend to the head, and also of the superfluities which are in the braine: and these two passing through the pores of the head, are converted into haire, by reason of the heate and drinelle of the head. And bicause mans bodie is
full

OF ARISTOTLE.

full of humors, and hath more braine than other creatures, and also more superfluitie in the braine, which the braine expelleth, it followeth that he hath more haire than other liuing creatures.

Question. How many waies is the braine purged, and other hidden parts in the head?

Answer. The waterie and grosse humors are purged by the eies, melancholie by the eares, choler by the nose, and fleume by the haire.

Question. What is the reason that some blush and change colour, when they heare that which they would not?

Answer. Shamefastnes is a certaine kinde of anger and displeasure, and feare ioined together, as when a man is offended against himselfe, or against another: & therefore whē we see or hear som thing to be discovered, which our selues haue done naughtily, or would not haue knowne, the anger which we conceiue is greater then the feare, and therefore the bloode runneth to and fro, in the end remaineth in the highest part of the bodie, vntill the spirits bee quiet and pacified, and the passion gone.

Question. What is the reason that such as are very fat in their youth, are in danger to die on the sudden?

Answer. Such haue their vaines very smal and close, by reason of their fatnes, that the aire and breath can hardly haue free course in them, and thereupon the naturall heat wanting some refreshment of the aire, is put out, and as it were quenched.

Question. Why doe garlike and onions growe when they are gathered?

Answer. It proceedeth of the great humiditie which is in them.

Question. Why do men feeles the cold sooner then women?

Answer. Bicause that men, being more hot then women haue their pores more open, and therefore the
colde

THE PROBLEMES

cold doth sooner enter into them, than into women.

Question. Why are not old men so much subiect vnto the plague, as yoong men and children?

Answer. They are cold, and therefore their pores are shut vp, and not so open as in the youth, and therefore the infecting aire doth not penetrate so soone as when they are open, as in youth, by reason of their heate.

Question. What is the reason that lime is set on fire, and on a greater heate, by casting water on it?

Answer. Lime is hot of nature, and therefore when water is cast on it, it fleeth from the colde, and by vnit- ing his force, gathereth a greater heate and strength, and so is set on fire. And that is also the reason that a candle doth burne faster in the winter than in the som- mer: for then, by reason of the compassing colde, the heate vniteth it selfe, and gathereth the closer to the tallow or waxe, and so doth consume it the faster.

Question. Why doe we cast water in a mans face which doth swolne?

Answer. Bicause that through the coldnes of the wa- ter the heate may run to the hart, and so giue strength.

Question. Why are those waters best and most delicate, which run towards the sunne rising?

Answer. Bicause that running towards the sunne ri- sing, they are soonest strooken with the sunne beames, and made pure & subtile, bicause the sunne hath them long vnder him, and by that meanes taketh away their coldnes, and other grosse vapours, which they take of the ground they run by.

Question. Why haue women such weake small voices?

Answer. Bicause their instruments and organs of speaking, by reason they are cold, are small and narrow, and therefore receiuing but little aire, causeth the voice to be small and effeminat.

Question. Whereof doth it procede, that wane of sleepe doth

OF ARISTOTLE.

doth weaken the bodie, and the braine?

Answer. Much watching doth ingender choler, the which being hot, doth drie vp and lessen the humours which conserue the braine, and the head, and other parts of the bodie.

Question. *Whereof doth it proceed that vineger doth stanch blood?*

Answer. It proceedeth of his cold vertue, and all cold naturally is binding, and vineger being colde, hath the like propertie.

Question. *Why is the sea water salter in sommer then in winter?*

Answer. This doth proceed from the heat of the sun, seeing by experience, that a salt thing being heated becommeth more bitter.

Question. *Why is smoake contrary vnto the eies?*

Answer. Bicause that in the eies there is a delicate and pure chrySTALLINE humour, and the eie is also colde, and without any colour at all, & the smoke is grosse and hot, and by that meanes doth pierce the humours of the eies and hurt them. And if the eie had any colour in him, all things set before him would seeme to be of the same colour. And bicause the eie is cold, and the smoke hot, it doth cause the vapors which are contained in the eies, to drop and distill, which is hurtfull for the eies.

Question. *Why doe men liue longer in hot regions then in cold?*

Answer. Bicause they are more drie, and by that meanes the naturall heate is better conserued in them, then in cold countries, bicause the cold doth extinguish the heat.

Question. *Why is well water seldome or neuer good?*

Answer. All water which standeth still in his spring, & is neuer heated with the sunne beames, is very heauie,

THE PROBLEMES

and hath much earthly matter in it, and therefore wanting the heate of the sunne is naught.

Question. Why do we sleepe better, and more at our ease on the right side, then on the left?

Answer. Bicause that when we lie on the left side, the lungs doe lie vpon and couer the hart which is on that side vnder the pappe. Now the hart being the fountain of life, being thus occupied and hindred with the lungs, cannot exercise his owne proper operations, as being ouer much heated with the lungs lying on him, & therefore wating the refreshing of the aire which the lugs do giue him, like the blowing of a paire of bellowes, is choked and suffocated: and lying on the right side, these inconueniences are auoyded.

Question. Whereof doth it procede, that the holding of the breath doth cause the yexing to go away?

Answer. Bicause the holding of the breath dooth heat the internall parts of the body, and this heate cha- seth away the yexe, being nothing els but a colde aire within the bodie.

Question. What is the reason that old men doe sneese with difficultie?

Answer. Bicause that through their coldnes, their arteries are very narrow and close, and therefore the heat is not of force to expell the cold: for I thinke that sneeing is like vnto the combat in the aire made by thunder, which is caused of heate and cold.

Question. Why doth a drunken man thinke that all things do turne round about him?

Answer. Bicause that the spirits which serue the sight, are mingled with vapors and fumes of the wine: & then the ouermuch heat causeth the eies to be in a continuall moouing, and the eie being round, causeth all things about him to seeme to go round.

Question. Whereof doth it proceed that the bread which is
made

OF ARISTOTLE.

made with salt, is lighter then that which is made without it, considering that salt is very heauie of it selfe?

Answer. Although bread be heauie of it selfe, yet the salt drying it, doth make it light, by reason of the heate which it hath, which heat doth drie: and the more salt there is in it, the better the bread is and the lighter, and the more holesome for the body.

Question. *Why is not new hot bread good for the stomack?*

Answer. Bicause it is full of moistnes, and thicke and hot vapors, which do corrupt the blood: and hot bread is blacker then cold, bicause heat is the mother of blacknes, and bicause the vapors are not gone out of it.

Question. *Why doth lessise cause a man to sleepe?*

Answer. Bicause they do ingender grosse vapors.

Question. *Why doth the dregges of wine and oyle go to the bottome, and those of honey swim vppermost?*

Answer. Bicause the dregs of wine and oyle are earthly, and no way purged before, and therefore being of the nature of earth, do go to the bottome. But honie is a liquor, which commeth from the stomacke and bellie of the Bee, and was there in some sort purified and made subtile, and by that meanes that which remaineth is light and hot, and therefore goeth vppward.

Question. *Why doe cats eies and wolfs eies shine in the night, and not in the day?*

Answer. The eies of these beasts are by nature more chrySTALLINE, then the eies of other beasts, and therefore do shine as they do: but the brightnes of the sun doth hinder them to be seene in the day time.

Question. *What is the reason that some men, when they see others daunce, do the like with their head, or feete, or by some other gesture of their bodie?*

Answer. The answer is, bicause that the sight hauing carried and represented vnto the minde that action,

THE PROBLEMES

and iudging the same to be pleasant and delightfull, & therefore desiring it, the imagination draweth the likeness of it in conceit, and so stirreth vp the bodie to those gestures.

Question. Why doth much sleepe cause some to growe fat, and some leane?

Answer. Those which are of a hot complexion, when they sleepe, doe consume and digest the superfluities of that which they haue eaten, and for that cause become fat. But such as are of a colde complexion, when they sleepe are more cold, and so digest lesse.

Question. How or for what cause do we suffer hunger better then thirst?

Answer. When the stomacke hath nothing to consume, it consumeth the fleume or humors, which it findeth most readie and most at hand, and therefore wee suffer hunger better then thirst, bicause the heate hath nothing to be refreshed withall.

Question. Why doth the haire fall after a great sicknes?

Answer. When the sicknes is long, or an ague, the humors of the head are dried vp, through ouer much heat, and therefore wanting nourishment, they fall.

Question. Why doth the haire of the eie browes grow long in old men?

Answer. Bicause that through their age, the bones of the eie-lids are thinne, by reason of want of hear, and therefore the haire doth growe there, by reason of the rheumes of the eies. The like doth happen to such as imagine much, bicause that with their heat they drawe many humours to the forepart of the head, where the imagination is placed.

Question. Whereof proceedeth gaping?

Answer. Of grosse vapours which occupie the vitall spirits of the head and the senses, and are cold & make men readie to sleepe.

Question,

OF ARISTOTLE.

Question. *What is the reason that some flowers do open with the sunne rising, and shur with the sunne setting?*

Answer. Cold doth close and shur, as hath been said, and the heat of the sunne doth open and inlarge. Some do compare the sunne vnto the soule in the bodie: and as the soule giueth life, and when it departeth death followeth: so the sunne doth giue life and viuificate all things, and the cold bringeth death, and withering, and decaying of all things.

Question. *Why doth grieffe cause men to growe old and gray?*

Answer. Age is nothing els but a drines and want of humours in the bodie: grieffe then causing alteration, and alteration heat, and heat drines, age followeth immediately and graynes.

Question. *Why are all gelded beasts weaker then such which are not gelded?*

Answer. Bicause they haue lesse heate, and by that meanes lesse force and strength.



MARCVS AN- TONIVS ZIMARAS SANCTIPETRINAS PROBLEMES.

I.



Hy is esteemed in the iudgement of the most wise, the hardest thing of all to know a mans selfe?

Is it bicause nothing can be known, if his forme and perfection cannot be knowne? To know the forme and perfection of a mans selfe, as it seemeth vnto the Philosopher, is a matter hard enough. And a man by the authoritie of *Plato*, either is nothing, or if he be any thing, is nothing else but his soule. Or is this bicause it cannot be done but by a reflected action? And to reflect and looke vnto himselfe, is a token that we are separated from the flesh. For he who would know himselfe, should be drawne from sensible affections, and how hard this is, no man is ignorant. Or is it bicause a man liueth by vnderstanding? But the vnderstanding of a man cannot conceiue himselfe, but after the vnderstanding of the sences which is verie hard.

II.

Why was Socrates esteemed the wisest of all Greece, by the Oracle of Apollo, seeing that by the opinion of Aristotle, he was conuersant and busied onely about mortalitie, and nothing about nature.

Whether is it bicause it is more expedient for the common commodie and vse of man to liue well, then

OF ANTONIVS ZIMARAS.

to contemplate? or bicause it seemeth to *Plato*, that was vsually professed of him euery where, I know this one thing, that I know nothing.

III.

Why do men especially contend and strive in things of wis?

Is it bicause they thinke, that other things which are called goods, are in the power of another? as the gifts of the body are natures, and externall and worldly goods are subiect vnto the rule of fortune: whereof it cometh to passe, that euery man can easily suffer himselfe to be overcome in such things, as things not happening through his fault or occasion. But they think wit to be in our owne power. Or is it bicause they think that the goods of the minde do excell all other goods, and therefore do thinke it is a thing most naturall to contend for that which is most excellent? Or is it, bicause it is a common disease of all men, as it seemeth vnto a certaine wise man, that euery man doth thinke himselfe more learned then he is, and therefore doth desire to performe that which he beleeueth, without studie and labor.

IIII.

What is the cause that few men take paines in attaining of sciences, seeing that all men by nature do desire to know?

Whether is it bicause that the gods haue put vertue to be gotten with sweat and labor, as *Hesiodus* saith? or bicause the pleasures of the bodie do draw a mans mind from the searching out of the truth? It is requisite for him who desireth to liue in mind, that he think & meditate on the earth of the bodie, as the diuine *Plato* doth thinke. Or is it bicause the nature of man is forced to serue many waies, as it pleaseth *Aristotle*: wherof it falleth out, that when things necessarie do faile, the naturall desire is not brought into action? for nature of himselfe is not sufficient to contemplate.

THE PROBLEMES

V.

Why do men say that Philosophie is naked?

Is it because truth is naked, & that there needeth no colour of words, when we handle a matter of truth? for it belongeth vnto Sophisters to dispute of rearmes, when the sincere truth is sought. Or is it because they do not play the Philosophers well, which seeke philosophie for gaine and ambition, and not for hir selfe? Or is it because he should be void from all wordly affections, who desireth to endeuour himselfe in the studie of Philosophie? for as *Aristotle* doth saie, The soule is made wise by rest and quietnes. And it were easie for Philosophers to become rich if they would, as it appeereth by the example of *Thales*.

VI.

Why doe men desire to be had in memorie after their death? and therefore some make pyramides, and statues, and images, and diuers other tokens & monuments which they build and leaue behind them?

Is it because all things, as it seemeth vnto *Aristotle*, do desire to participate of some perpetuitie and diuine being, as much as they can? And therefore if they cannot remaine in nature and being, yet they endeuour at the least to continue in opinion and conceit of men: or els hath custome brought it in so, to stirre vp such as come after, to the end they may not degenerate from their parents?

VII.

What is the cause why mens desires grow without measure, about fortunes goods?

Is it because naturall desires, as *Seneca* saith, haue an end, and such desires which proceed of a false opinion, haue nowhere, where to end?

VIII.

Why do Poets alwaies assigne and appoint some wise man to be

OF ANTONIVS ZIMARAS.

be familiar with Princes? as Homer doth Nestor with Agamemnon: Euripides Tiresiam with Creon: Hesiodus Prometheus with Jupiter: and Maro Achates with Aeneas?

Is it because that by the law of nature, as Plato doth say, wisdom and power should direct their actions to one end, and effect the same thing, loue it, and seeke it?

IX.

Why doth Homer, when he maketh mention of Embassadors, talke alwaies of the embassie of a commander, in bare words?

Is it because it is the dutie of Embassadors to declare the bare will of the commander, and put his sentence in execution? and therefore it is certaine that he should adde nothing nor take away any thing. Or els is it because the commandement of him who doth rule, that is, of a wise man, is set in good order, and is presumed to be most perfect? And therefore there should be nothing changed, but his decrees and constitutions are to be iudged absolute and perfect.

X.

Why doth Aristotle vse exceeding breuities in most hard matters?

Whether is it, because it is the custome of wise men to loade their words with sentences? or els to the ende that he would be obscure, to feare and keepe off rude wits from the reading of his works, as it seemeth to the expositors? Or whether is it because that in a hard matter, and in a matter of truth many words are suspected? because that truth doth consist in a few words, Or is it because that as it seemeth vnto the wise man, in many words there is error often committed?

XI.

Why do famous men in any science, when they do erre in any matter, erre more dangerously then those which are lesse famous?

THE PROBLEMES 40

Is it because that such, trusting vnto the skill of their owne wit, are drawn far from their senses, and therefore must needs be deceiued? *Auicen* may serue for a prooffe of this, who for all his fame in Philosophie, said, that a man might naturally be brought forth of the earth. And that famous great *Auerrois*, who thought that a maide might conceaue with childe in a bath, without knowledge of man.

OF OF ARISTOTLE.

Why is man, who is indued with learning, the most vniuersall of all liuing creatures?

Whether is it because with his wit and conceit, he is much giuen to pleasures? and therefore he doth seeke out greatly and weigh what felicitie is, which no man can obtaine but with iniurie.

XII.

Why doe men desire rather to seeme, than to bee and not seeme?

Is it because onely man is participate of honor? whereby it commeth to passe, that euerie man desireth to seeme good, and yet naturally fleeth labour, and yet we get no vertues but by labour. Or is it because the propertie of a Sophister is rather to seeme, than to be, and not seeme? But there are very few which truly attaine vnto vertue.

XIII.

Why do some in their youth beget girles, and in their middle age, or when they begin to grow old, beget boyes?

Whether is it because the seede waxeth cold in such as vse the act of carnall copulation too oft? And therefore in their middle age, or when they growe old, not vsing it so much, their seede is hotter, which is the begetter of males.

Why

OF ANTONIVS ZIMARAS.

XIIII.

Why haue children and boyes pleasure in the act of venerie, considering that they do not cast forth any seede?

Is it as the Philosopher saith, bicause that there is a certaine tickling and itching in the letting forth of the spirit, or breath, as it is in such as are of age, by the casting out of seede.

XV.

Why haue they lesser pleasure which vse this act of copulation oft?

Whether is it bicause that by often vsing carnall copulation, the spirit and seede doth decrease and wax cold? And therefore the seede is not so itching nor so tickling, which is the cause of delight, as Philosophers affirme.

XVI.

Why doth immoderate carnall copulation more hurt, then immoderate letting of blood?

Whether is it bicause the seede is fuller of spirit, and a nutriment better disposed and prepared for the nature of the bodie than the blood? for as it seemeth vnto Galen, the seede is the substantiall cause of the parts of the bodie, and of it the bodie doth growe, increase, and is nourished. And as he who is a hungred, is hurt more by the taking away of bread than of flower, so the bodie is more weakened by the taking away of seede, than by the euacuation of blood.

XVII.

What is the reason that such as haue a very long yard, cannot beget children?

Whether is it bicause the seed going a long distance, the spirit doth breathe out? and therefore is cold and vnfit for generation.

XVIII.

Why doe such as are corpulent cast forth little seede in the act

THE PROBLEMES

act of copulation, and are oft barren?

Is it bicause in such, the seede passeth into the nourishment of the bodie? and for the same reason corpulent women haue but small store of flowers?

XIX.

Why are women apter to the act of ventrie in summer time, and men in the winter?

Whether is it, as it seemeth vnto the Philosopher, bicause at that time their stones hang downward, and are feebler than in the winter? seeing it is necessarie for him who will vse carnalitie, to draw them vp. Or is it bicause hot natures do boile and chafe in summer and decay, and cold natures become liuely? for a man is hot and drie, a woman cold and moist. And therefore in that season the strength of men doth decay, and the strength of women growe stronger and liuelier, through the benefit of a contrarie qualitie. And for the same cause, as *Galen* saith, some beasts of a cold nature do almost die in dens and holes, through the excessive colde of the aire, and receiue little nouriture at all, which re-
cuiue againe when heate commeth.

XX.

Why is man the proudest of all lining creatures?

Whether is it by reason of his great and strange knowledge? for as the Philosopher saith, all sensible things consist in sence, intelligible in the vnderstanding, what remaineth then which escapeth his knowledge? Or is it bicause he seemeth to be the knot and fastening together of God and the world? for he is in the middle betwixt both. Or is it bicause he hath rule over all other creatures, and all things seeme to bee brought vnto his arbitrement? Or shall I answer, that the pride of man doth proceede of the want of knowing himselfe? for truly if he would remember that he is con-
ceited like vnto dung & vrine, if he would marke how
he

OF ANTONIVS ZIMARAS.

he is brought naked into the world, if he would weigh how he doth leade his life in miserie and toyle, if hee would thinke deeply how he is bound to die, he would not be proud at all.

XXI.

Why doth man especially vnderstand one thing, and do another?

Is it bicause there is the same science of contrarie things? or because the durie of the minde is to reach vnto many things, and the appetite tendeth vnto one thing onely? And a man for the most part doth loue by vnderstanding and reason, and beasts are lead with appetite, anger, and pleasure.

OUT OF ARISTOTLE.

Why is the man the wisest of all liuing creatures?

Whether is it bicause he hath a very litle head, in respect of the proportion of his body, as it seemeth vnto the Philosopher in his problemes? Or is it bicause he is of a most perfect nature, and therefore the habites of vertues are more excellent in him? Or whether is it because the bloud of man is most subtile, and pure, and cleane? The bloud is the nouriture, and that the last nouriture, and therefore there is great difference whether it be cold or hot, thinne or thicke, troubled or cleere. Or is it by reason, that through his owne constitution, he hath a most perfect sence of feeling, as experience doth shew in men? for because they haue soft flesh, they are endued with a sharpe and quick wit, and they whose flesh and skin is thicker and grosser, are dull and slow. And therefore the temperature of a man seemeth most fit and apt for prudence and wisdom. And that by reason that in a soft bodie and tender, the first and motherly spirit of the soule is easelier infused, and

THE PROBLEMES

and doth more willingly and speedily discourse: and contrariwise, the hardnes and thicknes doth stop, and therefore is a hinderance that the pure & cleere blood, whereof the spirits are engendred, be not carried from place to place: for vnto euery man is giuen a certaine portion of spirit, to worke withall.

XXII.

Why is a womans wit vnapt in good things, and most prompt in naughty things? as Euripides saith in Medea?

Whether is it bicause of a priuation, which seemeth to be coupled and ioined with hir nature? for as it doth appeere vnto a Philosopher, a woman is a man hurt: and the condition of a priuation is, alwaies to go about hurt and intend mischief.

XXIII.

Why do men say, that a womans first counsell should be chosen?

Is it bicause as we see in things which want reason, their actions and motions are guided and directed to their proper ends by a superiour power? for I thinke that to bee most true which is said, that there is a prouidence: which doth cast into an vn honest man the desire of honestie, and in a poore man the desire of wealth, as farre as is sufficient. So the vnderstanding of a woman, although they vnderstande not the reason of good and euill, is sometime directed by an infallible trueth to take such things in hand: but the counsels which they go about, through their owne searching, are to be left of, as weake, and subiect vnto many errors.

XXIIII.

Why do women desire rather to go trim, and decke themselves than men?

Is it bicause the nature of women is vnperfect? and thereupon they endeuer to supplie the want of nature with

OF ANTONIVS ZIMARAS.

with the benefit of art? for by nature that which is euill fauoured and vnseemely, doth couer and desire that which is faire and honest? or is it bicause that wanting the beaurie of the minde, they are forced to studie how to grim and decke their bodies?

XXV.

What is the cause that a tall man is seldome wise?

Is it bicause the largenes of his bodie doth proccede of excesse of heate, and abundance of humiditie? But wise men do thinke, that the perfection, accomplishment and goodnes of our operations is perfected by drines, which doth alwaies go on and increase, vntill it bring vs vnto our end. For the constitution of the bodie, from his first beginning did spring from the last humidie, but the vehemencie and excesse of heate doth ouerthrow the iudgement and quietnes of the minde.

XXVI.

Why is a multitude of princes or rulers naught, as Homer saith?

Is it bicause that if the gouernment should be turned into tyrannie, it is better to be vnder the yoke of one, than of many? Or bicause a multitude of rulers do seldome looke to the good of the Common-wealth? whereof it proceedeth, that if one do disagree, great hurt is like to hang ouer the comminaltie. It is easier for one man to be well giuen than many. In the gouernment of many there wanteth not strife, debate, and enuie. And therefore seeing that experience doth teach, that a kingdome will not receiue two, it is most truly said of Aristotle, that a multitude of rulers is naught, and therefore let there be but one prince.

XXVII.

Why haue other beasts their harts in the middelt of their breast, and man declining somewhat towards the left side?

Is it bicause it should moderate the cold of that side?
for

THE PROBLEMES

for as *Aristotle* doth say, man onely hath the left side cold. Or is it as the *Philistions* do say, bicause it shoulde giue place vnto the liuer, which is placed in the right side?

XXVIII.

Why doth a woman loue that man exceeding well, who had hir maiden head?

Is it bicause that as the matter doth couet a forme or perfection, so doth a woman the male? or is it by reason of shamefastnes? for as that diuine *Plato* saith, shamefastnes doth follow loue. It is reason that she loue and esteeme of him who loosed the bonds of hir credite and shame. Or is it bicause the beginning of great pleasure, doth bring a great alteration in the whole, bicause the powers of the minde are greatly delighted, and sticke and rest immoueably in the same? And therefore *Hesiodus* giueth counsell to marry a maide.

XXIX.

Why are the nights in the full Moone somewhat warme, seeing that according vnto the Mathematicians, the Moone is cold by nature?

Whether is it, bicause the opinion of the *Peripatetikes* is to be preferred, which say, that enery light doth heate, in that respect that it is reflected?

XXX.

Why are the nights in the Autumne colder, then in the spring?

Is it because the aire is then very thinne, and bodies which are rarefied are very apt to receiue heat or cold? as it is easily seene in the water: for water heated doth sooner freeze then cold water, bicause it is rarefied with the heate.

XXXI.

Why are our bodies sooner liued with colds in the Autumne, then in the spring?

OF ANTONIUS ZIMARAS.

Is it bicause the bodies which are accustomed vnto cold, do in the spring time come to heate? and therefore the moouing or mutation is naturall and not sudden: but in Autumne they hasten from heate vnto colde, not being accustomed, and without any mean. And nature doth not endure sudden changes, as *Galen* saith.

XXXII.

Why are men full of haire prone and apt vnto the lust of the flesh?

Whether is it bicause that in them, there is presumed to be great store of excrements, and of seede, as it seemeth vnto the Philosopher?

XXXIII.

What is the reason that men which haue a small head, are naturally angrie and restie?

Is it not bicause that when the head is little, and the braine by a consequence, the heat of the hart cannot be moderated with the cold of the braine as it ought to be? And anger doth proceed of the boyling of the bloud about the hart, through the desire of some thing which doth grieue and make the hart sorry.

XXXIIII.

Why doth a man hold fast together and close his fundament, after he hath made water?

Whether is it bicause the aire doth run presently to fill that which is void, and therefore the parts of the body are altered immediately with the coldnes of the aire, and do quake and tremble.

XXXV.

Why haue some men died through grieffe and sadnes, and some through ioy, and none for anger?

Is it bicause ioy doth coole the very inwarde guts? grieffe and sorrow doth suffocate and kill the inwarde parts, and coole the outward? anger doth heate both: whilest heat doth remaine, the life & nature remaineth,

H

bicause

THE PROBLEMES

bicause the soule is said to be life in naturall heart.

XXXVI.

Why doth the voice chaunge in man and woman when they begin to haue seed?

Is it bicause the hart is the beginning of the vaines & of the blood, as *Aristotle* saith against the Phisitions? and thereupon it riseth, that bicause the change of the excrement of seede is made in the highest part of the bodie, the voice as being aboute doorth make it manifest. And thereupon it is that the voices of both man & woman do change when they begin to haue seed.

XXXVII.

What is the reason that when a pot full of boyling liquor is seething ouer, yet the bottome is cold?

Is it bicause the hot vapors ascend vpward? and therefore when the vppermost water is hot, the bottom in meane space is cold, by reason of the coldnes of the water adioining next vnto it.

XXXVIII.

Why doe we finde the graine which we find in ants holes, and gathered in the summer tyme, gnawne on one end?

Is it bicause they are directed of nature, to gnaw and consume that end where the vertue of seeding is, for feare it sprout againe? truly, their labors sprouting and growing, they should be depriued of their nouriture, belonging necessarily vnto themselves.

XXXIX.

Why do the mothers loue their children more feruently then the fashers?

Is it bicause they take great paines with them? or bicause of the greater certaintie which they haue of themselves? as *Aristotle* saith.

XL.

Why is not the fasher as wel beloued of the sonne, as the sonne is of the fasher

OF ANTONIVS ZIMARAS.

Is it as wise men say, bicause loue doth not go backward, but alwaies forward? bicause that loue doth by nature serue such as liue, to continue the kinde: wherof it commeth to passe, that our naturall desire neglecting things past, doth looke to things to come. Or is it as the Philosopher doth say, bicause the father hath somewhat of his in the sonne, the sonne nothing of his in the father?

XLI.

Why doe the children for the most part, resemble rather the mother then the father, seeing that (as Aristotle doth say) the matter dooth not concurre, actiue to the begetting of the child?

Whether is it bicause all similitudes and likenes in mankinde and nature, are virtuallie contayned in the seede of the father? Whereby it is that for the most part the sonne is like neither, but the grandfather or great grandfather, and sometime like none of the familie. Or is it bicause this doth proceede of a strong imagination? for such are woont woonderfully to loue their wiues. For as *Auicen* doth affirme, the bodie is sometime chaunged by affecti-
ons, which are called *Affectus animales*: for they do print deepe impressions in naturall things, as it doth happen that the childe doth represent him, whose pourtrature and image was fore-conceaued in the acte of carnall copulation of the woman and of the man. But some of the vulgar sort, who knowe not the causes of things, are not contented with this doctrine: but the wise agree and consent vnto it. And therefore it commeth also to passe, that the bloud runneth and goeth to the externall parts in him, who casteth conceits in his minde of red things. And so some mens teeth are on edge, when they see another eate sowre things: and when we behold another, diseased &

THE PROBLEMES

griued in any part, the same part in vs doth languish and grieue. And often also the constitution of our body is changed through excessive feare.

XLII.

Why are asses more nimble, as the proverbe is, when they are young, then in any other time?

Whether is it bicause that their nature and constitution being melancholy from the beginning, it is requisite there should be a temperature, with the recompence of contrary qualities. For melancholy by nature is cold and dry: but when they are young they are hot and moist. This we also see in melancholy children, the which in their childhood are of great wit, and before it be looked for, are of great wisdom so farre forth that you may hope and promise any thing of them in time to come: whose wits neuerthelesse in progresse of time do decay and fade. Bee therefore (saith the Greeke) naught, to the end that thou maist liue, for the nature of such is most short.

XLIII.

Why be there no asses in Pontus and Scythia?

Is it bicause their nature is most impatient of cold, as the Philosopher doth say?

XLIIII.

Why are clergie men and women most couetous?

Is it bicause the habite of vertue is bred of many actions? and therefore seeing that priests do want wife and children, they are forced no waies to spend their goods, and yet are accustomed to take and receiue, & so become couetous. For as the Philosopher doth say: Such as euery mans actions are, such doth he become. The nature of women, as we haue often said, is vnperfect, and therefore they thinke it impossible, fully to satisfie themselves. And therefore they gather together, and keepe, that by that meanes they may helpe their

OF ANTONIVS ZIMARAS.

their need, and by industrie and arte they couet to get, that which nature doth not giue them. And for the same reason, I suppose old men giue themselves to co-uctousnes: for wanting and being destitute of helpes by age and nature, they gape after the goods of fortune, that with them they may resist and oppose themselves against all wants.

XLV.

Why do wounds greene lesse in war, then out of war?

Is it bicause the powers of the soule bende another way? for as the Philosopher doth say, if our minde be strongly fixed vpon other matters, we doe not see those things which are before our eyes. Or whether is it by reason of anger, the which as wise men doe say, doth heate the internall and externall parts? And as *Aristotle* doth affirme, with heate the soule doth worke all things. And therefore it happeneth, that the angry man doth growe colde but slowly after his wound, and therefore also he doth lesse grieue and late.

XLVI.

Why do we woonder at the eclipse of the Sun and the Moone, and not at all at the generation of plants and beasts by seede?

Whether is it bicause our admiration ceaseth in things which are vsuall, and our minde neglecteth to search out the truth in such things? But that which hapneth seldome, doth stir vs vp to woonder, and induceth the vnderstanding to search out the causes of it.

XLVII.

Why doth the head-ach, and dulnes of the memorie, and an euill disposition of the imagination followe the long detayning of the seede?

Whether is it bicause it doth hinder and make heavy the braine by excesse of seede? or else bicause the seede long kept, getteth some venemous qualitie, and therefore the fume and vapor of it doth hurt the head?

THE PROBLEMES

XLVIII.

Why do Priests and Munkes feare and abhorre death more then any men?

Is it bicause they are by nature cold and melancholy? or bicause they perceiue themselves to perish vterlie? for when they are out of this world, they neither continue in their owne nature, nor in posteritie.

XLIX.

Why if trees fall their leaues, and beasts their haire and feathers, they receiue them againe? and if a man become balde, his haire commeth no more?

Whether is it bicause the times of the yeere do bring that change of bodies so, that in the first change there followeth an interchangable course one after another? and beasts receiue againe their feathers and hair, and trees their leaues: but baldnes commeth vnto man through age, but nature giueth no comming againe to age.

L.

Why doth a summer end all diseases?

If force and nature be strong, it shall finde an ayre most fit for resolution, and digestion, and expulsion of superfluities: if weake and ouerthrowne, the heate doth ouerthrowe it more: it doth loose weake bodies, and therefore there commeth nothing vnto the sicke bodie but death.

LI.

Why, if a man do put his hands into the water in the summer, he is colder when the water is mooued, then when it standeth still?

Whether is it bicause the parts of the water which touch his hands, be hot by the heate of his hands? for euery agent which doth communicate with the patient, in the thing whereon it worketh, in dooing doth suffer again, and the water being mooued, it is necessary that the

OF ANTONIVS ZIMARAS.

the parts of it which are rarefied be scattered abroad, and others more cold succeed them.

LII.

Why do some which haue an euill complexion and constitution of body liue longer, then some others which are of a sanguine and better nature?

Whether is it through his bad gouernment and order? or bicause there was some hidden cause in those dispositions: for as *Auerrois* saith, the number of the elements is infinite in the works of nature, the which none besides the author of nature doth vnderstand.

LIII.

What is the cause, as the Physicians do say, that the suffocation of the matrix, which happeneth vnto women through strife and contention, is more dangerous, then the detaining of their flowers?

Whether is it, bicause that how much the more an excrement is perfect, as long as it doth continue in his naturall disposition, by so much the more it is worser, when it is remooued from that, and drawne to a contrary qualitie? As it is seene in vineger, the which is sharpest which is made of best wine. And so it hapneth, that the more men loue the one the other, the more they hate, when they fall at variance and discord.

LIIII.

Why doth the land which standeth still, seeme to mooue vnto such as sailc on the sea?

Is it bicause the instrument of the sence of seeing is accidentally mooued, when the ship is mooued? whereby the likenesses and similitudes of things perceiued, are receiued with the moouing.

LV.

Why do we loue our sight aboue other senses?

Whether is it, as *Aristotle* doth saie, bicause it doth shew vs the differences of things? or bicause his know-

THE PROBLEMES

Jedge is more drawne from materiall substance ? or is it bicause the diuine force of loue is placed in that sence, as Plato saith.

LVI.

Why do we not iudge a staffe to be broken in the water, seeing it doth so appeer in the sence of the sight ?

Whether is it, bicause we perceiue by the sence of feeling & touching, that the sight doth erre? or is it bicause we do not iudge with the same power as we doe imagine with. And an argument of this is, bicause the sun doth seeme to be but a foote round. And by a trick and moouing of the fingers, one thing doth seeme two, and yet we do not yeeld that they be two.

LVII.

Why do we put our hand ouer our eies when we will see any thing a far off ?

Is it bicause the sight should not be dispersed ? and so Aristotle doth say, that those which haue their eies standing out, cannot see farre : and contrarie, such as haue them hollow in their head, can see farre, because the moouing of the sight is not scattered.

LVIII.

Why can some see the object before their eies far off, better then if it be neerer their eies ?

Is it because things which may be seene cannot be seene, but by the meane of the bright aire ? and weake eies do want more plentie of light, then strong eies. But the object being put far off from the sence of the sight, in the distance from the thing seene doth require a greater light, then good eies need : and the further the object is, the more light there is in the distance betwixt the object and the sight. Or else bicause the motion which proceedeth from an object farre distant vnto a weake sence, is weake, which the sence can well endure ? But the motion which is hard by is strong, which a weak
eie

OF ANTONIVS ZIMARAS.

eye cannot suffer: which is easily seene in old men, the which by reason of their weaknes do see a farre off, and can reade small letters in the light of the sunne, the which notwithstanding, can not hard by them reade, nor see at the light of a candle, or the Moone.

LIX.

Why can some see things hard by them, and cannot see things further off?

Is it not through the weaknes of their sight? for in such the power of seeing is very weake, and not vnited together, and therefore they had neede of a strong moving: as it is also in such as haue their eyes standing out, which cannot see faire.

LX.

Why do such as would shoote aright, wincke with one eye?

Is it because the power of the sight is then more and better vnited, and therefore is better able to performe his actions?

LXI.

Why be such as haue beene long in the darke, if on a sudden they come into a great light, halfe blind?

Whether is it because nature cannot endure those sudden mutations? or else because the spirit of their sight is small and weake, and therefore are glad of their like, and is dissolued when they come into the light? Or else is it, because of the desire of the light, which they wanted a long time, they do behold the light too earnestly? And so their sight is weakened, as it hapneth in such as haue a long time endured famine, and therefore eating greedily, do take more then they can digest, and so by that meanes perish.

LXII.

Why do such as see weakely, for the most part, write small letters? it is maruell that such as are purblind, or haue a weake sight, should doe that which dooth belong vnto such

THE PROBLEMES

as haue a good sight?

Is it bicause that things hard by do seeme great, and such are wont to write with their eie hard by their paper? Or is it bicause they do write almost winking? For if they should write with the eies wide open, their sight being dispersed and scattered abroad, it woulde waxe dimme. And therefore wincking they see more quicker: and therefore seeing that through their wincking, their passage of seeing is narrowe, they must of necessitie make a small letter.

LXIII.

What is the reason that if a man will see farre in the night, he shall do it better if he bowe his head neere vnto the ground, then if he stand vpright?

Is it bicause the obscure vapors which made the aire darke, are thicker aboue in the aire, then they are neere vnto the earth, and thereupon do more hinder the sight farre off in the aire, then neere vnto the ground? or is it bicause the light of the stars being dispersed through the aire, causeth a reflection neere vnto the earth, although weakely, and so by that meanes doth somewhat the more make light vpon the ouermost part of the earth?

LXIIII.

What is the cause, that if a man hath committed any euill fact, he cannot dissemble it in countenance, and in his eies? and therefore the Poet doth say; O how hard it is not to bewray a fault with thy countenance?

Is it bicause the eie is the messenger of the hart, as a glasse of the minde wherein all things do shine? or is it bicause it is the weakest part of the bodie, and the fullest of passages? and therefore all alteration which beginneth in the hart, (which as the Periparetikes do say, is the beginning of all feeling and cogitation) goeth directly vnto the eies.

LXV.

OF ANTONIVS ZIMARAS,

LXV.

Why cannot such as gape, or put forth, or receive aire, heare well?

Whether is it bicause the end of the instrument of hearing, is ended at some spirituall part? whereby it commeth to passe, that it is shaken also and moued, together with that spirituall or aerious instrument, as oft as it doth moue that aire: for it is moued when it doth moue. Or is it bicause much breath or aire doth outwardly enter in at the eares, whilest we gape, and therefore mouing and sense cannot bee perceiued? for it doth thrust at the eare. The noise is the aire, or some affection of the aire: and therefore when the aire within the eare is weakened, and the aire outwardly doth enter in, of necessitie the one dooth hinder the other: and that which is within doth beate out and expell that which would come in.

LXVI.

Why can nothing bee the cause of his owne generation and corruption?

Is it bicause the mouer must be before the thing moued, and the ingenderer before the thing ingendred, and that it is impossible to be before himselfe?

LXVII.

Why are womens bodies looser and softer then mens bodies, & lesser, and why do they want haire?

Is it by reason of their monethly termes? for with them the superfluities go away, whereof haire should grow, and whereof the flesh should be filled, and therefore they are lesser, and therefore also their vaines are more hidden, than mens vaines.

LXVIII.

What is the reason that when we thinke vpon any horrible thing, we are stricken into a feare?

Is it bicause the conceit, thinking and vnderstanding
of

THE PROBLEMES

of things, haue force and vertue? for as *Plato* doth say, the reasons of things, haue some affinitie with the things themselues. For the image and representation of cold and heat, is such as the nature of the things are, as the Philosopher hath said. Or is it bicause that when we comprehend any dreadfull matter, the blood runneth to the internall parts, and thereof the externall parts are cold, and shaken with feare.

LXIX.

Why cannot a companie or multitude of women be led vnder a captaine without tumult?

Is it bicause they are inconstant by nature? And for the same reason the Philosopher woulde appoint no shepheard ouer goates, bicause they are instable and vnconstant by nature. Or is it bicause a woman is more prating, woorser toonged, and more backbiting? also complaining, despairing, and lesse wise, and more lying than a man.

LXX.

Why doth a radish roote helpe digestion, and yet himselfe remaineth undigested?

Whether is it bicause his substance doth consist of diuers parts? for there is some thin parts in him which is fit to digest meates, the which being dissolued, there doth remaine some thicke and close substance in him, which the heate cannot digest.

LXXI.

Why do such as cleaue wood, cleaue it easier in length, then ouerswart?

Whether is it bicause that in wood there is a graine, if it be cut at length, as it is to follow the haire in cloth, which doth go on in length: whereby in the very cutting, one part draweth another fast by it.

LXXII.

What is the reason if you strike a speare on the ende, the sound

OF ANTONIVS ZIMARAS.

founde commeth sooner to one which standeth at the other ende, then vnto one who standeth neerer to him which striketh?

Whether is it bicause that as it hath been said, there is a certaine long graine in wood directly forward filled with aire, but crosse or on side there is none. And therefore a beame or a speare strooken on one end, the aire which is hidden receiueth a sounde in the foresaide graine, which serueth for passage for the aire. And therefore seeing the sound cannot go easily out, it is carried vnto the eare of him who is opposite vnto him, and those passages do not go from side to side, and therefore the sound cannot be so distinctly heard.

LXXIII.

Why be there not famous men in euerie facultie in our age?

Is it bicause the nature of man decaieeth in our age? and as *Solinus* saith, succession being corrupted, the progenie of our age is woorse by birth? Or is it bicause such are not esteemed of Princes? for take away the reward due vnto vertue, and no man will imbrace it. Or is it so ordained by nature, that men do alwaies complaine of the present time?

LXXIIII.

Why are flatterers in great credite with Princes?

Is it, as *Plutarke* saith by the authoritie of *Plato*, bicause they loue themselues? Too much immoderate loue of themselues, causeth them to admit flatterers, and to giue them credit. Or whether is it, as I thinke, bicause they want the light of reason? For among birds, some through the corruption of their nature, delight in stinking meates, and whom the day doth blinde, and the night doth lighten.

LXXV.

Why haue Philosophers for the most part in these daies euill conditions?

THE PROBLEMES

Is it bicause they are not esteemed of Princes? or is it bicause that for philosophie it selfe they are accused of crimes, and thinke therefore they receiue such rewards, and therefore they are compelled to forsake vertue, and flee to vice? Or else deceived through error, they thinke they haue challenged all the garments of philosophie, when they haue snatched vnto themselves some of hir rags. And therefore they are by vs rather called Sophisters than Philosophers; for certainly a Philosopher should be of a stout courage in all respects, and in all fortune: for they reason badly that therefore they should giue themselves vnto Philosophie, bicause they would be honored of Princes. And their desire is not ruled by nature, but by error, and are thrust forward with the straeme of false credulitie.

LXXVI.

Why do such as are angrie waxe pale in the beginning, and afterward red?

Is it through the desire of reuenge for that which griueth, that the heate and blood are called vnto the hart, and therefore of necessitie the externall parts are pale? when they haue determined to put that in execution which they desire, the heate and blood do run vnto the outward parts, and then they are greatly to be feared and to be taken heede of.

LXXVII.

Why do Serpents want a yard and stones?

Is it bicause they want thighes, and therfore do want a yard, and they want stones, bicause of the length of their bodie.

LXXVIII.

Why can Serpents turne their heads backward, and the rest of their bodie stand still?

Whether is it bicause that like vnto those beastes which are called *Insecta*, they are made of a winding compo-

OF ANTONIVS ZIMARAS.

composition, and haue their ioints flexible and made of gristles. And this is the reason in serpents, and also bicause they may auoid those things which hurt them: for hauing no feete, and being long of bodie, they cannot easily turne them, whilest they bow against those things which are behinde them. It were to no purpose to lift vp their head, if they could not exercise anger.

LXXIX.

Why is the Chamelean changed into diuers colours?

Whether is it, as it seemeth vnto the Philosopher, bicause that he is the slenderest of all footed beasts ingendred of eggs, and is starke for want of blood? The cause is to be referred vnto the qualitie of the minde: through ouer much coldnes he is of so many colours: for it is the propertie of feare to binde fast, through want of blood and heate.

LXXX.

Why are the thighes and calfe of the legs of men fleshie seeing the thighes of other beasts are not so?

Is it bicause man onely goeth vpright, and therefore haue them so to sustaine the vpper parts: and therefore nature hath giuen the lower parts corpulencie, and hath taken it away from the vpper: and therefore she hath made the buttocks, the thighes, and calfe of the legs fleshie.

LXXXI.

Why do very fat beasts waxe old quickly, and soone die?

Is it bicause they haue but a little blood, seeing that much of it is drunken vp with the fat? And those which haue but small store of blood are aptest to die: for death is a want of blood.

LXXXII.

Why dosh man onely go vpright?

Is it bicause he is most hot of nature? or is it bicause his substance is diuine? The part of diuine things is to vnderstand

THE PROBLEMES

vnderstand and be wise: which could not easily be, if a man had a great massiue bodie: for heauines doth make the vnderstanding and the sense slow.

LXXXIII.

Why is the flesh neerer the bone sweetest?

Whether is it bicause it receiueth temperature through the equalitie of the contrarie? for the nature of flesh is hot and moist, and the nature of the bone is cold and drie. And therefore of contrarie extremes there must needes be a meane.

LXXXIIII.

Why is it forbidden to talke whilest we eate?

Whether is it bicause, that before the wizzard, by the which we eate and drink, the arterie is put, by the which aire and breath goeth vnto the lungs, and this arterie is molested with meate or drinke entring vnto it. Yet nature hath prouided for this a little flap, which doth couer the arterie, the which is opened when we speake. And therefore meate can easily get into it, whereof followeth choking and coughes. Or whether is it bicause speaking doth hinder the chewing of the meate, and therefore the meate is not well digested?

LXXXV.

Why doth wine mingled with water, after a sort make a man soonest drunke?

Whether is it bicause the water doth cause the wine to run hither and thither, and penetrate the more. And that is the reason that Must, as *Auicen* doth say, doth sooner make a man drunke than wine, bicause that the water mixed with it, doth make it penetrate.

LXXXVI.

Why are Noble men, and such as are placed in high dignities troubled with the gowte?

Is it bicause they cram in diuers sorts of meates euen to the fil? And the Physicians do affirme, that there

is

OF ANTONIVS ZIMARAS.

is nothing woorser then at one time to take diuers sorts of meats, & then be a long time in eating and drinking of them: for the first is halfe digested before the other come: and therefore such as remaine not long yndigested, breede rawe and naughtie humours, which runne vnto the joints. Or whether is it by reason of ouermuch pure wine, and too much idlenes, and exercises done out of due season? Or is it through the ouermuch vse of lechery, which wasteth & killeth digestion? These things are greatly to be feared, as *Plotinus* saith, least we become stockes or brute beasts: for like vnto brute beasts they are giuen to gluttonie and the bellie.

LXXXVII.

Why are they taken with sudden death, which are loaden with ouer much fat, and especially when they be yoong?

Whether is it bicause their vaines be strait, & therefore are stopped with the fat, that the spirits cannot haue free course? whereupon the heate which is bred within them doth kill them, bicause they cannot receiue the cooling of the aire. And therefore as the Physicians do say, they should greatly feare least their vaines breake, or their naturall heate be suffocated.

LXXXVIII.

Why can such be hardly let blood which are very fat, and that with danger?

Whether is it bicause they haue very slender vaines, and they hidden? or else bicause al fat is without blood, as it seemeth vnto the Philosopher,

LXXXIX.

Why, as Aristotle doth affirme, are the sensible powers in the hart, and yet if the hinder parts of the braine be hurt, the memory payeth for it: if the forepart, the imagination: if the middle, the cogitative power?

Whether is it bicause the braine is appointed by nature, to coole the heate of the hart? whereof it is, that

THE PROBLEMES

in diuers of his parts he scrueth the powers and instruments in the hart: for euerie action of the soule doth not proccede from one measure of heate.

XC.

Why doth it happen out for the most part, that children which are not lawfully borne, are wittier and subtiler, and liker vnto the parents, then others?

Whether is it, bicause the powers of the minde of the parents are very vehemently bent in the act of carnall copulation? such do loue exceedingly, and therefore seeing that their affections be not distracted, the childe by nature shall not varie from them. And that is most true, when they go together with tranquillitie of minde: for if it be with feare or grieffe, the children be vnlike.

XCI.

What is the reason, seeing that death is by nature, yet it is more terrible vnto man, then vnto all other liuing creatures?

Whether is it bicause the nature of man, as the Philosopher saith, hath purchased the meane, not onelic of liuing, but also of liuing well? for mankinde onely, is partaker of supernaturall things, other beasts haue regard vnto that onely which they see, wherein, as Plinie doth saie, the goodnes of nature doth suffice, which is to be preferred before all other things: and therefore they thinke not of glory, wealth, ambition, nor of death. Wherefore seeing that a man is depriued of a more noble life when he dieth, death is vnto him aboue all other most grieuous. Or is it bicause other beasts regard onely things present, and man onely foreseeth things to come.

XCII.

Why if death come by nature, is it iudged the last of all terrible things?

Whether is it, as it seemeth vnto the Philosopher, bicause

OF ANTONIVS ZIMARAS.

bicause it is the last, and that nothing else doth seeme good or bad vnto mortall men? Or is it bicause we inueigh against nature, who is the beginning of necessity, and not the nature of the forme, or of the end, from which that which is good is deriued, which all things do desire? or peradventure doth death seeme the most terriblest of all things, bicause they ment so to liue, that they thought to be immortall? or doth it strike a feare onely into them which liued a naughtie life? And vnto such as liued a vertuous life, death is not grieuous, as the Poet saith. Death is the end of a prison obscure. Or be they griued bicause they are sealed on with a violent and vntimely death? for such as die when they come vnto old age, do for the most part die without feare and grieue. For truly nature is, as a candle readie to be put out. And as *Plato* doth say: of al sorts of death, that which by nature doth come is most light, which hapneth rather with pleasure then dolour.

XCIII.

Why seeing that man is the end of nature, is he of so short a life, in respect of other liuing things, as Poets doe complaine, by the example of the crow?

Whether is it bicause that those our makers consulting of our kinde, the perfection of fraile things, is not measured at all by continuance of time? as the Philosopher saith: It is farre better to be very ioyfull a short space, then a long time meanelly or lightly glad. Or whether is it bicause that nature of things possible, doth alwaies make that which is best? And it could not be that the constitution of mans body could be conuenient and fit for long continuance and the operations of the soule. For by the authoritie of the wise, there is required another temperature first for life, and another for the works of life. Whether shoulde they make vs of a long life and the worse, or of a shorter

THE PROBLEMES

and the better? It seemeth good vnto them, saith *Plato*, to preferre a short life and a good, before a long life and a bad.

XCIIII.

Why did nature bring forth man naked, and without defence?

Is it bicause nature doth make nothing without reason or in vaine? seeing that a man is most wise, he can vse many instruments to helpe himselfe withall. The hand is not one instrument but many. And therefore they thinke amisse, as the Philosopher affirmeth, which say that a man is the noblest of all creatures, and yet in woorser case then all, bicause he is naked and weaponles: And other beasts keepe their common helpe, and cannot change it by any meanes, but man can change his weapons at his pleasure: for the hand is a hoofe, & horne, and speare, and sworde, and euery other kinde of weapon. Seeing then that a man is indued with vnderstanding, and hath a hand giuen him by nature, he cannot complaine of his nakednesse and condition. Whether was the excellency of the substance of which mankinde was made, fit and conuenient for hornes, and such like?

XCV.

Why is wine put into a vessell of water mingled with salpeter, very cold?

Bicause saltpeter is presently *actu* colde, though it haue power to be hot, and the water mingled with it is colder then the wine. Now a thing which is more colde, doth make a thing lesse cold, more cold then it was: & therefore the wine put into such a vessell is cooled the better. I haue sometime answered, that it proceedeth of the Antiperistasis, that is, by a repulsion whereby heate or colde is made strong, and euery contrarie by his contrarie: but saltpeter is not hot *actu*, but in *potensia*.

And

OF ANTONIVS ZIMARAS.

And therefore hauing power onely to be hot, and is not hot indeed, it cannot worke by that contrarietie : for it is *actu* cold, as the feeling can iudge.

XCVI.

Why hath philosophie seemed a woonderfull and a diuine shing vnto some ?

Whether is it, bicause that as a medicine is the perfection of the bodie, so philosophie is the perfection of the soule, as *Themistius* saith ? Or is it bicause the studie of Philosophie doth increase and further vs in our dutie towards God, and make our zeale more seruent ? for those things being perfectly knowne which God hath done, he turneth al mens harts and minds to praise and admire him. This admiration, charitie, faith, and hope doth follow. Or whether is it bicause it doth breed great pleasures and delights, through the certaintie of it and sincerenes ? or bicause it doth make vs like vnto God ?

XCVII.

Why do tyrants hate learned men ?

Is it by reason of the vnlikenes in maners ? for so it hath alwaies been that wisdome hath been iniured by euill maners. Or do they feare least they should breede sedition and tumults in their cities with their doctrine and authoritie ? or bicause they do taxe and reprehend their conditions ? for as *Plato* doth say, Poets haue great force and skill, either to praise or dispraise, and euery man who hath a care of his fame, shoulde take heede how he offend a Poet.



ALEXANDER A-
PHRODISEVS PRO-
BLEMES.

I.



*Hy did Homer call men Polioctotaphus, of
the haarenesse of the temples?*

Bicause that for the most part
there gray haire begin, bicause the
forepart of the head hath more moi-
sture and fleume in it, than the hin-
der part.

II.

Why is onely the forepart of the head bald?

Bicause it is loose and soft. And therefore seeing that
the haire doth want nourishment, by reason of naturall
drines, it doth easily fall in those parts: it doth not stick
as it doth behind, where the head is drier and thicker.

III.

Baldnes proceedeth of drines: and therefore such as
haue curled haire be soonest bald, by reason of the dri-
nes of their head: and are graie haired verie late, by
reason of the drines which consumeth the superfluities
of fleume. They are watchfull aboue others, bicause
sleepe commeth of humiditie. Children do shew this
bicause they are both moist and sleepe, and full of ex-
crements. Such as haue softer haire, as such be which
haue a moist head, are of a contrarie disposition: for
they

OF ALEXANDER.

they are verie seldome or neuer bald. And sometime baldnes happeneth by some defect of the kinde, or stocke, as the gowr, and some other diseases. Such are sooner bald, and are sleepey, and haue much superfluitie. The hoare haire be whitest, bicause they follow the colour of fleume, from whence they proceede. They be sometimes almost yellowish, when the fleume is mingled with burnt choler.

IIII.

Why are old men full of excrements, and watchfull?

They are full of excrements, bicause they are colde and weake by nature, and therefore digest badly, and so gather many excrements by the pores and open passages of the bodie. And seeing they be drie, they are also waking and watchfull, and also bicause their bodies be hard & stiffe. And children notwithstanding the interlacing of the pores, and soundnes of their bodies, are moist.

V.

Why haue children which are moist by nature, and full of excrements, no hoare haire?

Bicause they are moist and hot, and fleume is moist and colde, and haue the forepart of the head as it were fleshy and thinne, wherby superfluities are voided: and that with age doth grow hard, and bonie and thicke: & therefore nature doth afterward giue it seames, by which superfluous vapors should breath out and euaporate.

VI.

Why doe women and gelded men quickly growe hoare and gray?

Women bicause they are cold by nature, and haue small exercise, do gather many superfluities, and especially then when their flowers cease. And gelded men bicause they yeelde no seede, but do yeeld superfluitie

THE PROBLEMES

which should breed seede, the which with the bloud doth spread it selfe ouer all the bodie, and that hath the nature of fleume.

VII.

But why do they want haire?

Women bicause they be cold, and haue thicke passages in their bodies: for colde doth thicken, and therefore there is no way which way haire should passe. Gelded men bicause they are moist, and aboue measure full of excrements, and therefore in such moist places as no hearbes can grow, so neither in dry and stony, which baldnes doth follow.

VIII.

Why are gelded men for the most part crooked legged?

By reason of that superfluous humiditie, they haue soft and wet bodies, and therefore weake, and therefore seeing the thighes cannot beare the burthen of all the body, they are wreathed and crooked, as a bulrush doth bend if a weight be put on it: for that which is hard and drie is strong, and can resist: and that which is soft and moist, is weake and cannot resist. This is declared by wood, and osiers, and also men. And with baths and drinke men are much weakned: and with a moderate diet are dried, and become stronger vnto any action. Whereof it ariseth, that gelded men are after a sort women, and weake, and giuen to wine, and drunkenness, and full of fleume. For being colde, they couet to induce the contrarie qualitie, and wine by nature is hot. The Æthiopians being of a drier nature, haue curled haire, and are leane, and strong to worke.

IX.

But why haue they a sharpe shrill voice?

Againe, abundance of humidity filling vp the artery, doth make it strait, and therefore the breath going by a narrow passage, doth cause a sharpenes in the voice.

OF ALEXANDER.

voice. It is plaine that they abound in humiditie, because they be light, and their paps grow great like vnto women, and haue swelling eie lids, and haue soft white haire.

X.

Why do some gelded men after a sort conue women, and doe sometime loue the act of venerie?

Bicause some are but vnperfect gelded men, and some haue a hot liuer, and haue large vessels and conduits of seede. And therefore they imagine the vse of carnall copulation: they cannot performe that which they desire, and their priuities want liuelinesse. For that spirit which doth puffe them vp, doth alwaies faile, and is weake: that spirit rising of the seede, through the passages of the seede, is carried from those parts which are about the loines. But in children those conduits of seed are closed vp.

XI.

Why seeing there be three simple vniforme humors, yet they do not breed three simple diseases, but more?

There are double in euerie one, continuall, or whole and broken. For the difference of diseases do not proceede onely of the humors, but also of the places. A hot, thin, and sharpe humour doth breede a sharpe, and a short, and a hot feuer: a cold and a thick humor, a long and a dull one. So of wood, that which is hot and drie, as baies, oliue trees, cause a great flame, and are quickly burned: greene wet wood make a small smokie fire, and are long a burning.

Againe, if the place be large & spacious, it doth sooner, and that greatly inflame the humour, because that when it is heaped vp together, then at once being full rotten it is put on fire. But if the place be narrow and small, seeing it cannot containe all the humour, but by peecemeale, and therefore cannot ripen all together,

it

THE PROBLEMES

it will stirre vp a small feuer, but such a one as shall burne long. Put then the nature of the humour vnto the place, and so shalt thou finde all the differences of agues, which rise of the corruption of the humours. If yellow choler doe putrifie in great receptacles, as the vaines and arteries, seeing it is hot, doth kindle a most sharpe, hot, and short ague, which is called a burning, or heat. But if cold fleume do putrifie in the small vaines and arteries which are about the flesh, it dooth cause a long and a languishing ague, which they call a Coridian. But if yellow choler do corrupt in small receptacles, it doth cause a small and a short ague, but yet sometime longer than a heate, which we call a Tertian or sharpe ague. But if fleume do putrifie in great places, it will cause a shorter ague than a Coridian. And likewise blacke choler, if it putrifie in great vaines, bicause it is burned almost all at once, causeth a short ague by fourthes: if in small, it breedeth a longer quartaine: for there doe concurre a cold and a thicke humour not fit to alteration, and a narrow place, which will not suffer all the melancholie and anger to be consumed at once.

XII.

Why doe some when they are ashamed sweate vnder the armpits?

° Bicause the pores are thin in that place, nature, when any thing is woorthie of reuerence and honour, doth flee with the blood into the vaines and arteries, and they being full do distill. As it doth happen to such as are merrie, bicause their bodie is made thin, and especially the armpits.

XIII.

Why do such as are afeard waxe pale?

Bicause our nature, and that power which hath a care of our bodie, will suffer nothing done externally vnto

OF ALEXANDER.

vs. And as we do run within doores to keepe our selues from danger, so nature looking vnto hir safetie, conuaineth hir selfe into the bodie as much as she can, and carrieth the blood with hir, whom she hath for hir nourishment and wagon, and that blood also which is best: and that is the blood which doth die our skin with a red purple colour.

XIIII.

But why do they tremble also?

Bicause that *virtus animalis*, that is, certaine spirits which rise about the hart, with the consent of nature doe forsake the sinewes, which before they kept: and it bee they which keepe the bodie from trembling: whereupon it riseth, that such are loose in the bellie, and vnawares doe make water. For those muscles and sinewes which doe stop the course of excrements, being become weake then, giue leaue for superfluities to passe.

XV.

Why do such as are ashamed waxe red?

Bicause that nature of hir selfe, as it were with a certaine conscience, like vnto a noble virgin, reuerencing that which is woorthie of honour, moderately doth draw hir selfe into the secretest parts of the bodie. The blood is moued with hir, and powred abroad, and therefore the skin is died with the colour of blood. Others say that the blood is cast over them by nature, like vnto a vaile, as we as it were admonished by nature, do put our hand before our face.

XVI.

Why are some dead with feare?

Bicause that the naturall power fleeing about measure, and retiring it selfe with the blood into the inward parts of the body, doth choke and put out that naturall liuely blood which is bred nere the hart, and therefore
doth

THE PROBLEMES

doth bring death. By the same reason, when much oile is powred on a sudden into the flame of a lampe, it doth put out the flame. The blood which is in the hart is compared vnto the flame of the candle or lampe. Some for the same cause haue died with griefe: as fire couered with a couer is put out, so the inward motion of the naturall heate is resolued.

XVII.

Why are some overcome and dismaied with drunkennes?

Bicause that abundance of wine doth suffocate and choke with his heate our naturall and liuely vertue. And it happeneth chiefly vnto such whose naturall heate is weake and small. That which is strong and much can resist, and in space of time can overcome and digest the abundance, as a great flame can endure much oile to be powred on it.

XVIII.

Why do olde men shake and tremble?

Bicause that the sinewes of our naturall vertues and forces, and the muscles of the parts of the bodie, when they receiue not sufficient motiue vertue, do not endeavour to beare the burthen of the bodie. The shaking is, bicause the weight of the bodie draweth some part of the bodie downward, and another power which is called *Animalis*, vpward: when this is done without intermission, and one after another, it causeth a quaking: then cometh in bowing and stowping to the ground, and so in steede of a rafter to vphold the building, they vse the helpe of a staffe: and for the same cause they auoid their excrements and vrine on a sudden.

XIX.

Why do not pepper and mustard seed heat the bellie, if they be swallowed whole, but if they be broken they do?

Bicause that those things which haue their qualities in

OF ALEXANDER.

in power onely, and not in action, want some externall helpe to bring their vertue and power into action. And therefore being brused and made small, and entring into the passages of the bodie, do worke his effect through their inherent heate. And the like is of other qualities. There be some things which haue their qualities in action, as the water, risan, and milke, are to be drunke presently: they are moist and cold, nor want no other externall helpe to coole and moisten, but do worke immediately. Likewise the salt and the earth, both virtually and presently and in sight are drie. Line seede and bread are drie in imagination and in sight, but moist in vertue and act. The sea also and brine and pickle, and Aqua vitæ, are moist in imagination and in sight, but are drie in vertue and actu, action.

XX.

Why doe some see nothing in the night, and see in the day?

Bicause they haue a thicke spirit of seeing, and which cannot pearce the aire, vnto the thing which is scene: and in the night it groweth more thicke, bicause it is made more cold with the absence of the sunne. Or else as others do say, bicause that in the day time it is made fine and attenuated with the pure and hot aire, and is thickened in the night. The contrarie vnto this doth happen in a Cat, and an Owle, they see nothing in the day, and see very well in the night: for they haue a very cleere and thin sight, the which when it doth somewhat thicken in the night time, is most fit to receiue his object: in the day time and in a cleere light, being exceedingly attenuated and made thin, is resolued and scattered. Whereupon Lions which are almost of the like qualitie, cannot go in the sunne, and if they see fire in the day time they flee from it. A man may see the ball of their eie very bright, and they haue the moist of their eies very cleere.

Why

THE PROBLEMES

XXI.

Why doth a sudden vehemens ioye sometime dismay a man, and astonish him?

Bicause that when the vitall vertue, and inward naturall heate is immoderately carried to the outwarde parts, it is cast out & resolved: and therefore such sweat and grow red, bicause the blood is present. The naturall heate, and fire, both by reason of his heate, and also bicause it is out of his place, moue vpward, and then for desire of food and nouriture downe againe. And when one of these moouing do perish and faile, the man perisheth and faileth also.

XXII.

Why do such as are in grieffe, and in loue, and in anger, sigh very oft?

Bicause that the minde of such as are greeued, is turned vnto the cause of grieffe and sorrow, and the minde of such as couet, to that which they doe couet, and the minde of the angrie, vnto that which causeth the anger. The minde then being intentiue vpon that whither shee moueth, doth after a sort neglect and forget to giue motiue vertue and power vnto the muscles of the breast. Therefore the hart not receiuing aire by opening of the breast, and by a consequent neither blowing nor cooling, nor yet casting forth, by shutting and closing, any sighing superfluities, which are bred of the adustion of blood, whilest it dooth feare suffocation, the hart, I say, doth force the minde and giue him warning, that he would giue more motion vnto the muscles, and cause greater breathing in and out, and that he would take in more store of cold aire, & thrust out more excrements, and that by often small breathings he would performe that that one great one doth effect. And therefore men of old time, called the word *suspirio* sighing, of the straitnes of the breast. They do sigh long & often, bicause the
minde

OF ALEXANDER.

minde is alwaies vpon that which causeth the passion. Nature doth force the soule to send in by the hart more motiue vertue to the muscles of the breast. It is most euident that wee doe breathe in and out by the arteries. Vnder the name of pulse, the opening and shutting, the receiuing and casting out breath is comprehended.

XXIII.

Why is a sausage hardly digested?

Bicause that through his lightnes, it dooth swim in the belly aboue the moist meat, nor doth not ioine with that meat where concoction is made, but swimmeth at the gizzard where appetite is, and not digestion. If you cast him into the water out of a mans bodie, it will not sincke but swimme aboue the water. For whilest meate is minced in it, it receiueth a light aire, which causerh it to swimme aboue moist things : and therefore it is limber and flaggie, bicause it is participant of aire.

XXIIII.

Why doe wee make hot water before wee goe into the bath, and after that we haue beene long in the bath, our vrine is cold?

And this is so in comparing it to some other. Vrine is of a luke warme qualitie, and moderately hotte: therefore out of the bath, bicause our bodie is colde, the vrine we make, as it were in comparison is hotte, yet in the bath, bicause the bodie is much hotter then the vrine, therefore the vrine dooth seeme colde, although it bee hotte after a sort. The which dooth appeare by that, that hee who dooth goe into a bath to get heate, if hee onely goe into hot water, it seemeth very hot, but if already heated he go into it, it doth not seeme so hot.

XXV.

Why doe wee finde sweete fresh water, when we digge neere the sea?

Bicause

THE PROBLEMES

Bicause that in the sea that water which is thinnest and purest is fresh, that which is thicker is salt: the thin water therefore which runneth through the passages of the earth, is hidden in the earth, the which we finde when we dig. It is fresh, bicause that in winter it is drawn vp into the aire: the thicke and dried water doth become salt, but in the sea shores, bicause the passages be broad and wide, salt water is found.

XXVI.

Why is well water warme in winter, and cold in sommer?

Bicause that euery thing doth flee from his contrary as from his enemie. It is manifest that cold is contrarie vnto heate, and doth destroie it. And therefore bicause that in sommer heate doth occupie the aire, the colde doth flee into the bowels of the earth, and therefore causeth the water to become cold. But in the winter, bicause the colde hath greater swaie in the aire, then the heate againe fleeth to the same place, and so doth heate the water. For it is against the law of nature, that contraries should dwell together in the same place and time.

XXVII.

Why are men of a smal stature commonly wiser than the tall?

Bicause that in small men the soule is well ioined and compacted together in the whole bodie: in tall men it is extended in length. And therefore *Homer* doth describe *Vlysses* to be short and wise, and *Ajax* tall and a foole.

XXVIII.

Why do we cast water into a mans face when he doth sworne, to make him come to himselfe againe?

Bicause that through the coldnes of the water, the heate may repaire to the hart to giue strength.

XXIX.

Why do many fooles beget wise and strong children?

Bicause

OF ALEXANDER.

Bicause that fooles when they are in the act of copulation, yeeld very much vnto pleasure, and haue their minde drowned in the bodie. Whereby it commeth to passe, that their seede being participant of great vertue, as well reasonable as naturall, doth cause such as are begotten to be the wiser. But it happeneth otherwise vnto such as are wise and learned: for their seede wanteth much naturall vertue, and the force of wisdom maketh them to think on some other external cares, which weakeneth their intention in the act of veneric.

XXX.

Why doth not the dung of wilde beasts stinke so much, as the excrements of men?

Bicause they vse drie, and not superfluous meats, and haue great exercise: yea the dung of some beasts are of a good saueur. But of all other the dung of a man doth sauer worst, bicause that men do vse manie moist meats out of season, and more than is needfull. Then they are lesse hot than other beasts, and are not so much exercised. And therefore seeing that it is not fully digested, nor euaporated, by reason of the abundance, but doth corrupt, therefore it is of a bad saueur.

XXXI.

Why doth mustard and such like sharpe things, blister, and exulcerate the skinne, if it be put on it, and when it is swallowed doth not exulcerate the bellie?

Bicause they are dissolued with the moisture of the bodie, and bicause they are chaunged and digested before they worke: and vpon the skin which is thin they haue more time to worke.

XXXII.

Why doth barley bran, seeing that it is cold, dissolve fluxe?

Seeing that all colde doth make thicke, and hinder dissolution: truly I thinke, not bicause it doth coole, therefore it doth loose and dissolve, but bicause it doth

THE PROBLEMES

cast out, it hath a vertue of diuiding and expelling humours. And there are diuers such kindes which worke contrarie vnto themselves, accidentally and by chance not principally. As the nature of Bees which are hot, do weaken an ague: not bicause they are hot, for the like doth increase his like: but bicause they do expel naughtie humours from the vaines, and prouoke vrine. So flower-deluce, and hysope are good for the pleurisie: although they be hot, yet they do cut those humours which do breede betwixt the skin, and which girde the side. So the disease which is called *Tetanus*, is cured with hot water powred on it, which is bred of cold humours: it doth heale it not principally, and of the owne nature, but bicause it is heated.

XXXIII.

Why do some men puffle and blow when they make water?

Bicause the bladder when it is full of water doth swell, and straiten the gut which is called the right gut: and when it is emptied, a winde which is in the gut desireth passage out. Some think that there is an agreement in these parts in the auoiding of the vrine.

XXXIIII.

Why do some gape when they see other men so gape?

Bicause the nature of liuing creatures, and especially of such as want reason hath a likenes of consents, and affections. And therefore when one asse doth pisse, the others do stalle likewise.

XXXV.

Why doth one which is bleere eyed, infect one who is whole, and yet he who is whole cannot heale the bleere eyed?

Bicause the eies are soft and moist, and exposed vnto affections: then health receiueth an alteration of a small cause, and sicknes of a great and vehement: and that which is in a meane, is easlier changed of that which is vehement, then contrariwise, the vehement &
great

OF ALEXANDER.

great of the temperate & meane. And therefore bleer-
nes being a vehement and great disease, doth easlie
turne health, which is a temperate and moderate state
of the bodie.

XXXVI.

*Why do money and an apple seeme greater in the water then
they be?*

Bicause the water doth deceiue the sight, and the
water about them make them seeme of one colour. So
the Sunne, and the Moone, and the Planets, when they
are scene neere vnto the point of the rising or falling,
seeme to be of a greater bignes then at other times: for
they alter the aire about them with their qualitie.

XXXVII.

*Why when a man doth giue a blow with a staffe far off, we see
the blowe presently, but wee heare the sounde after, although the
sound and the blow go together?*

Bicause we haue a sharper and quicker sight then
hearing, and therefore the sight doth anticipate the
stroke, and the hearing which is grosser, doth heare the
sound slowlier. And by the same reason we may dissolue
the doubt of thundring and lightning: for we see the
lightning before we heare the thundring, although the
thunder be first, or at the least together with the light-
ning: and yet the sight being more subtile then the hear-
ing, doth see the lightning before the eare doth heare
the thunder.

XXXVIII.

*What is the reason seeing wee bee naked on our face, and clo-
thed ouer all the bodie, yet we can indure cold better on our face,
then on the bodie?*

Vse is the cause of it.

XXXIX.

*What is the reason that yellowe choler, which all a mans
life time is contained in a place which is called the bladder of
choler,*

THE PROBLEMES

*choler, doth not ease out the same bladder, seeing that it is subiect
vnto many alterations, and yet if it fall into a rooth but a small
time, which is a bodie which cannot easily suffer, it will presently
ease him out?*

Bicause nature hath so wrought, that it should onely
remaine in that bodie and not hurt it. The name of na-
ture is a great remedy against griefe, as by many exam-
ples it can be prooued. The infant is in the wombe of
the mother nine moneths, and giueth no griefe of
heate vnto hir: but if a light winde should breede there,
it would presently cause a sharpe disease. The rough ar-
terie is the onely receptacle of winde: but if a crumme
should go amisse in it, it causeth either choking or a ve-
hement cough, which could not be so if nature had not
so prescribed.

XL.

*Why do some men go into a bath a thirst, & come out without
thirst, and some contrariwise go in not a thirst, and come out a
thirst?*

Such as are drie, do waxe moist in the bath, and
quench their thirst: for thirst commeth of drines.
But those which are moist, and not thirstie, if they staie
long in a hot aire, are a thirst, bicause their moisture is
dissolued and spent with sweat.

XLI.

*Why do some belch vnsauorously after the eating of a radish,
and some not?*

They whose stomack and belly doth not abound with
naughtie and superfluous humors, tending vnto fleume,
they haue a sweete breath: but they whose stomacke
doth abound, they haue an vnsauorie breath. A radish is
hot, and doth cut and attenuate the grosenes of hu-
mours, and doth stirre vp a winde of the humours, the
which it doth cast foorth by belching. So dirt which is
not stirred doth not sauer at all, but if it be stirred,
yeeldeth

OF ALEXANDER.

yeeldeth a strong stinck. Those which thinke that a rash is of a stinking qualitie of himselfe, because it doth stinke out of the bodie if it be long kept, without doubt are deceiued. For all men which do cate of them should haue an vnfauory breath, if that were so.

XLII.

Why in very great cold, do the fingers and superficiall parts of the bodie waxe blacke and decay?

Because that extreame cold doth driue in the naturall heate into the bodie, and so the outward side of the bodie doth first grow wan, then blacke, and almost like a corse. They do fall and decay, because that nature being intentiue in the other parts of the bodie, doth ioine vnto it selfe that which is hot, and doth driue away and cast out that which is decayed and naught. The superficiall parts are altered, because that they be not verie fleshie, nor verie hot. For in trees those leaues fall soonest in the winter, which are least hot in nature, & therefore are weaker and thinner. Those which say, that the naturall heate doth presently in the beginning flee from the cold, as it were from an aduersarie, into the internall parts of the bodie, and then gather it selfe againe & strengthen it selfe, & as it were with a supplie helpe those parts which were altered: and so either because it was on a sudden, or because great store of heate doth run back againe, and so burne the vttermost parts of the bodie, because that staying there, there is much of it gathered together, those I say without all doubt do thinke amisse which say this.

XLIII.

Why are such in great paine, which being verie cold, do heat their fingers ends, or vttermost parts of the bodie?

By reason of the sudden change of qualitie, much colde doth change into much heate. Whatsoeuer is suddenly done, doth bring grieve to nature. Whatsoeuer

THE PROBLEMES

is suddenly done agreeing vnto nature, doth delight nature: for mans bodie doth consist much in the maner of his disposition.

XLIII.

Why doe such as ease pepper, or great morsels of bread, yexe?

There is a proportion in them with those things which do outwardly ouercharge vs, or cause vs to haue paine. Pepper and choler haue a proportion with thornes: but fleume and bread with a heauie stone. Such as haue a stomack, not full of superfluities, nor hot and sensible, they are quickly bitten with the sharpenes of pepper: they do stir vp the stomacke to auoid & cast out that which griueth, and so do yexe. But such as haue a colde stomack, and full of fleume, and feele not so well, they do not yexe so soone. The like doth happen vnto them which do swallow great store & gobbets of bread, the stomack is oppressed with the abundance & greatnes of bread: and nature doth not suffer hir parts to be idle, when the feeleth any thing that doth hurt hir. And therefore pepper, with his biting qualitie, which hath a proportion with yellowe choler, and bread with the waight of his quantitie, and also abundance of fleume, oppressing vs within, do cause yexing.

XLV.

Why doe such paines as are in the nailes greenously torment vs?

Bicause that the sinewes which are in the fingers, with a peculiar kinde of superfluitie do breed the naile, as the teeth are in the gums. Therefore when the sensible vertue of the sinewes goeth to the extreame parts, and is there gathered together, like water flowing into a valley, without all doubt, the greater the alteration is, the greater grieve is felt.

XLVI.

Why doth a great deale of bread deuoured hastily, by slaying from

OF ALEXANDER.

from breathing, drive away the yexe?

Bicause that pressing the stomacke, and driving it into a narrow roome, it causeth that the meate which is hardened in it, to be pressed out into the belly, and so the stomacke being discharged, doth staie the yexe.

XLVII.

Why do such as yexe, giue vp yexing when they heare of any sorrowfull matter?

Bicause they are intentiue vpon that which sorrowful newes brought, and therefore neglect to moue their breast. And againe, seeing we do then hold our breath, and so cause it to grow great in vs, it doth stay the yexe.

XLVIII.

Why doe pictures to those which are neere them, shew their colours plaine, and vnto those which stand a farre off, shew some hollow, and some bending and hanging?

Bicause the force of seeing is dissolued and stretched in a long distance, and therefore cannot see exactly the skill of colours, but doth see the white colours bending, and the blacke hollow. For the white doth shine outwardly, and moueth it selfe vnto that which is bright, but blacke as being darke, inwardly.

XLIX.

Why if cold water be an enimie vnto the sinewes, is not hotte water a friend and good, but yet that is also hurtfull?

For if such a thing be hurtfull, the contrarie is profitable: for contraries cannot worke the same way, vpon the same thing. But in truth hot as hot in his owne nature is not hurtfull vnto the sinewes, but in that that it is hot and moist. Such as haue their sinewes hurt, their sinewes bicause they are of quicke feeling, want much fastening, and bending, for they are drie of their owne nature: but the moistnes which is contrarie, doth mollifie them, and slaken them, and putrifie them. And so it is plaine that heate of it selfe is not hurtfull by nature.

THE PROBLEMES.

nature. A draught of hot oile is good, because it hath a binding nature.

L.

Why if apples be naught, because they be cold and moist, is not water so too being of the same qualitie?

Because water is more subtile than apples, and sooner purged, and therefore it doth not hurt so much: yea, it doth somewhat strengthen the bodie.

L I.

What is the reason that those things which have a harde concoction, and are of a grosse humour, are more easlier digested, as beefe, than those which are of an easier digestion, and are of so grosse a humour, as fish?

Some attribute this vnto custome: some thinke the cause to be in some secret hidden qualitie of nature, Some say that by reason of exceeding heat, those meats which are more digestiue than is requisite, as being more mutable, are burnt, and consumed through the great force of heat. And those meats which are not apt to digest, as being hard to be changed, seeing they be not much changed, are only digested. So straw as being apt to be altered, with great fire turneth into ashes presently: but the like is not in oke which is orderly burned.

L II.

Why are such as are sicke and in paine, pale outwardly?

Because that nature, as we haue said, doth penetrate euen vnto the hart, together with the blood. And it is the blood which doth heate the superficial parts, and make them thin and cleere.

L III.

Why doth cold wine grow in AEgypt, which is a hot country?

For the same reason. Againe, the cold doth flee to the rootes of the vines, and doth make them colde: for the vines are more apt than other trees to receiue alteration.

Why

OF ALEXANDER.

LIIII.

Why doth hot water cast into a well, cause the water to be very cold?

Bicause the cold which is in the well, doth resist the heate: and bicause it is greater than the heate, it doth prosecute the heate by all meanes, and doth flowe into the hot water very much, and so make it cold.

LV.

Why, when a small beaſt doth flee into our eies, do we shut the other eie when we put him out?

Bicause that the spirit of seeing cannot go out by the eie which is shut: but gathering it selfe together, goeth with all abundance to the eie which is open, and doth fill it, and make it swell outward, and so that is driuen out and expelled that is in him.

LVI.

Why do such as are buffeted see fire?

Bicause that the spirit of seeing, being made thinne and slender with the blow, doth waxe fire, and so going into the aire, is scene as he is. The like doth happen when two stones, or two peeces of iron are striken together: for the aire betweene both is greatly rarefied and made thin, and becommeth fire. The like also doth happen in the cloudes.

LVII.

Why is not fire made by the striking of all stones?

Bicause some of them do yeeld too much, and are too light, and as it were full of holes. For all striking of the aire doth not make it thin alike, and by reason of his lightnes it doth flee, and enter into euerie passage. And therefore it is not all striken at once, nor all waxe fire. The like doth happen by striking of wood. And fire is made of the sunne and water: for the broken beames of the sunne against a glasse, do waxe more and more fire, and do rebound vpward againe.

Why

THE PROBLEMES

LVIII.

Why do such as itch, desire hot feruent things?

Bicause that fleume, through whose grosnesse and cold itching doth rise, doth dull the feeling of the skin.

LIX.

Why are they also glad of baths?

Bicause heate doth disperse the fleume, and the nailes also do dissolve it.

LX.

Why do the shoulders itch most?

Bicause they are colder than the foreparts, and therefore haue more fleume in them. And that is the reason, that old men which are cold, are much troubled with the itch.

LXI.

Why is the coming downe a ladder more easie, then the going vp?

Bicause that in descending, the waight of the bodie doth of his owne nature mooue downward: in ascending, the strength doth labour in lifting vpward the waight of the bodie. So a stone is easier cast downwarde than vpward: for that which is heauie tendeth downwarde.

LXII.

Why do children cry when they are first borne?

Bicause their nature and senses, do as it were wander in a strange countrie: for they come out of a warme soft bodie of the wombe into the cold aire. And peradventure also they are afraid of the light.

LXIII.

Why do Bees, Emmons, and Flies, and such beasts as are called Insecta, die in oile.

Bicause their breathing hole is very narrow, which oile doth stop, and therefore they perish.

Why

OF ALEXANDER.

LXIIII.

Why do we coole hot things by blowing on them, and heat cold things?

Bicause that breathing being hot, going out doth dissolve their qualitie. We coole hot things, bicause we do moue and resolue their hot qualitie.

LXV.

Why doth flesh putrisie in the night under the full moone?

Bicause then the aire is hot and moist, which disposition doth especially further putrefaction: whereof it riseth that if the heat and moistnes be small, concoction is wrought: if great, consuming: if heate preuaile, burning. The Moone also hath foure dispositions: the middle doth seeme to be moist, and after a sort hot: the full, hot after a manner and drie: in the wane, dry and cold: when shee is without light, colde and dry: for then shee wanteth the sunne beames,

LXVI.

Why are such pale as are in paine and greefe?

Bicause that nature remembring that which dooth vex her, fleeth with the bloode to the inwarde parts, which doth paine the skin: and it happeneth lesse vnto those, then to such as feare.

LXVII.

Why are such red as are glad?

Bicause that nature doth meete that which delighteth of her owne accord, if it be without, as wee doe our friends and children. The blood dooth follow nature, which dieth the flesh with a red colour. Palenes cometh by the contrary vnto this.

LXVIII.

What is the reason, that in a dead sleepe in the night, when we open our eyes suddenly, we see light?

Bicause that the force and spirit of seeing being gathered together in sleeeping, & increased, doth rush out through

THE PROBLEMES

through the dark in great abundance, and being bright
himselfe, doth see like vnto the light.

LXIX.

Why do such as are ashamed, cast downe their eies?

Bicause the eies are the glasse of the minde: for we
see the affections of the minde by the eies, as grieffe, an-
ger, shame: bicause the minde cannot beare that which
is not worthie of honor, for conscience sake, it causeth
the muscles of the eies to be cast downe, as it were hi-
ding himselfe.

LXX.

Why can the eare endure all moistnes, the water excepted?

Bicause that the water being cold, is presently carri-
ed vnto the sinew of hearing, and all colde is hurtfull
vnto the sinewes. Again: Why before a great wind, are
there as it were some running stars or lightnings going
before to foretell it, and especially in a drie cleere ele-
ment? Bicause that it began to blowe before, and yet it
appeared not vnto vs, bicause we haue grosse thicke
bodies of hard senses. And therefore blowing the vpper
aire, which is more thin and pure and heavenly, it doth
conuert into fire, and therefore we see some of his spar-
kles. When it hath gotten a greater force, it moueth
this grosser aire which is about the earth, and so is
heard and felt, and perceived.

LXXI.

*Why cannot some see very great things a far off, yet see things
which are neere vnto them, although they be very small?*

As such as we call purblind, bicause they see best
winking: truly I thinke that the force and spirit of see-
ing is very thin and pure, and therefore when it goeth
far is dissolued, and cannot reach vnto the object which
is seene. It doth scarce see things neere by reason of
his thinnesse and purenesse. There are some which see
very small things a far off, as certaine olde men. These

OF ALEXANDER.

contrariwise, because they haue a thicke spirit of seeing and much, it doth moue and reach a great distance off, and by that meanes is attenuated and made thin, and apt and fit, to receiue things visible. And so two contraries are dissolued.

LXXII.

Why are dogs onely above all other beasts, lined so rogish after they couple?

Because the necke of the matrix hath a narrow passage, and the dogs yard doth swell in coupling, and the seede is cleauing in them, which happeneth vnto them by reason of their drinesse. The drinesse doth straiten the parts, and moisture doth make them thicke.

LXXIII.

Why are dogs onely mad in summer?

By reason of their drie disposition: they are very drie by nature, and most of all in summer. And therefore when their humiditie is heated and dried, they are set on fire, and so they are mad like vnto frantike men. And therefore their some at the mouth is most drie and venomous: for it is manifest that it is inflamed either by often breathing, or by fire eies, or by gaping of their mouth, which they haue alwaies open to take aire, or else because their taile groweth crooked with drinesse, and falleth away. They are most raging which are most drie. Some say that the canicular star, through his influence, doth cause them to go mad.

LXXIIII.

Why are they lesse griued which become blinde on a sudden and against their will, than they which by election?

Because that such as on the sudden suffer it, haue their minde turned another way. But those which by choise and election haue their minde wholie vpon the thing which is cut, do know what they shall suffer, and therefore suffer greater torment.

LXXV.

THE PROBLEMES

LXXV.

Why do such as carrie burdens go singing?

Bicause the resonable soule is delighted with musick, and therefore turned vnto it, doth feele the lesse weight. And in like maner answer, when the question is asked, why in funerals, bells, drums and flutes are vsed: and why multitudes of men resort vnto such as mourne, or be sicke, and vse diuers speeches vnto them: for the minde being occupied and intentiue to the words, doth feele the grieve lesse. And therefore Comedies and stage plaies were inuented in times past, to withdrawe the minde.

LXXVI.

Why do the Aethiopians for the most part die of an ague, and why are those which are bleere eyed vlceraed?

They are most hot and drie, and there is a kinde of resolution of elements in them, and that little moisture, which is in them being consumed, it happeneth that the other elements are dissolued. The heat goeth away for want of meate, the cold riseth vp through the absence of heate. Drinesse doth raigne through the consumption of moistnes. And for that cause dead carcases are cold and drie. And therefore *Homer* did know, that in dead bodies two elements did flee away, that is, the lightest, and thinnest, and two remained: there went away fire and aire, and there remained water & earth, that is, drines and coldnes. They are exulcerated and blistered in the blearenesse of their eies, bicause that the blood is made full of choler, by reason of inflammation, which doth heate the eies with his sharpnes.

LXXVII.

Why are such alwaies a thirst which haue the dropisie?

Bicause that that moisture is salt, and passeth not away, but doth putrifie, and drie the mouth of the stomacke, and they haue small feuers withal. Further looke
how

OF ALEXANDER.

how much more the belly is puffed vp, so much the more the rest of the bodie is drier, seeing it is not naturally nourished, and doth waxe feeble and feeble. For much of the foode turneth into water & increaseth the discafe.

LXXVIII.

Why do we in the beginning of a banquet, and before we be full sit close, and before the end of the banquet we take more room, and thinke our selues pressed?

Bicause that in the beginning al which sit, desire, and haue an appetite vnto the meate, and therefore haue an eie vnto that which is on the table, and all do fall to it. But after they are well satisfied, one boweth one way, and another another, and haue no care at all to that which is before them: and by this meanes after meate we take more roome.

LXXIX.

Why in whatsoeuer place we haue haire, they waxe gray, saving vnder the armpits?

Bicause that place is hot, bicause it is thicke of arteries, sinewes and vaines, and is also thin, and therefore doth alwaies voide the excrements of fleume, and therefore do sweate alwaies.

LXXX.

Wherefore if fleume be cold, and thick, and clammie, and likewise blacke choler cold and thicke, but much lesse then fleume, yet a quartaine ague is longer then a quotidian?

Bicause that fleume, although it be cold, and much of it, yet it is moist, and moistnes is easily altered and changed. Blacke choler or melancholie is colde and drie, and therefore is hardly altered and changed. They deceiue therefore with the likenes of cold, and abundance of choler, and do hide some contrarie qualitie. Furthermore, fleume is more agreeable vnto nature than melancholie: and therefore when a mans helth doth perish with hunger, nature doth turn fleume into

THE PROBLEMES

into nouriture. And therefore in a quotidian ague, the turneth all the profitable fleume into nourishment, and that which is vnprofitable putrifieth, and kindleth an ague.

LXXXI.

Seeing that there are foure humours which do sometimes putrifie, wherefore are there onely but three agues, and not foure?

Bicause that blood naturally is a nutriment of the bodie. And when it doth abound, it causeth a repletion onely. If it be corrupted, it remaineth blood no longer: for being heated, it is chaunged into yellow fleume. Therefore the other humours abounding, breede diseases, and especially about the skin, as serpentine vlcers, and cankers, two kindes of leprosie: and when they be corrupted they breed agues.

LXXXII.

What is the reason that the externall parts of the bodie of louers are sometimes colde, sometimes hot?

Bicause that when they conceiue any griefe or dolor against their welbeloued, the naturall heate posteth away with the blood into the internall parts of the bodie: whereof it commeth that the outwarde parts are colde, and for the same cause they become pale and sad. But when they receiue any good hope of their lover, or be greatly angrie, then the heate with the blood goeth to the skin, and becommeth hot and ruddie. And for the selfe same cause Painters do paint loue to be sometime sad and quiet, sometime fleering and laughing, a verie boie and childe, bicause that lust is vehement, but dureth nor long. The affection in lawfull friends is durable, as in fathers towards their children, and wiues toward their husbands, but loue doth not last. And it happeneth oft among such as are vnknowne the one to the other. The other disposition and affection is firme and stable: and immoderate loue is vehement, & like

OF ALEXANDER.

like vnto a mad man. They faine loue to haue a fire-brand, and wings, bicause that the mindes of louers are in suspense, and hang doubtfully, and are vnconstant like birds: and then their heate burneth their hart with an vncessant, and yehement care of that which they loue. He holdeth a sword in his right hand, and in his left a quier with many arrowes, bicause that in the beginning loue doth rise from one beame and glance of the eie: for he doth see and desire at the selfe same time. And as soone as he dooth desire, the louer sendeth continuall beames of the eie rowardes that which hee loueth. And those beames are like vnto arrowes, bicause the louer doth dart them into the bodie. There are arrowes in the quier, bicause that those which loue, sende foorth secret beames and glances of the eies. As the winde dooth kindle the fire, so custome dooth kindle loue: for properly loue dooth not rise of custome. For if it were so, then of necessitie custome should alwaies breede loue: but the beginning of loue is sudden. He is naked, bicause that that desire happeneth without any meane. For no man loueth by another, nor priuily, nor whom hee knoweth not. And therefore caruers doe sometime carue kings and gods naked for honours sake, thereby to shew that they haue no hidden vice lurking in their breasts, but that their thoughts are open and sincere. Loue is not one but many, either bicause there are diuers louers of things, (for they loue not a like: and *Plato* saith, that loue is a beast with many heads) or els, bicause as the same *Plato* saith, the same loue falleth vnder many loues. Loue hath Venus for his mother, that is, sensualitye and lust: and by the image of Venus they faine vnlawfull desire. Loue is said to haue been in loue with *Erinnys* a furie of hell, bicause that many haue loued wickedly, & haue beene thral to wicked affections: as I

THE PROBLEMES

haue declared in my second booke of Allegories, which I haue made of those fained stories.

LXXXIII.

Why do some die in a plague, and some not?

This proceedeth of their disposition of bodie. For if a man haue a body full of euill humours, him the aire which is corrupted doth enter into, & corrupteth that little good humour which is left in him: and so all their humours being corrupted, they must needs perish. But if a man haue not many superfluties, and doth abound with good humors, he is either not at all, or not much offended with the plague. That the disposition of the bodie is the cause of this effect, it doth appeere by the example of externall things. The oake is not easily subiect vnto alteration, nor is not easily set on fire. Reedes and rushes are much more apt to receiue fire: and straw more then they. But if you take wet straw, and greene reedes, and verie drie oake powdred ouer with brimstone, you make that fit to burne which was not fit. By this example you may dissolue another question, how it commeth to passe, that wearines doth rather breede a quotidian ague, then that which breedeth of putrefaction, or that which is called Habitual: for we saie that this doth proceede from the disposition of the bodie: for he had not any superfluous naturall spirits, or humors. All things which are sound and solid are drie. And the cause is in the same, why the heate of the sun doth procure sleepe in some, and in other some not. For he in whom there was much fleume, that being dispersed, doth moisten the head, and then he is in a sleepe: but such as haue a drie head are kept more awake, because they are made more drie.

LXXXIIII.

Why doth the sun make a man blacke, & make dirt white, & make waxe soft, and the dirt hard?

By

OF ALEXANDER.

By reason of the disposition of the substances which do suffer. All humours, scume excepted, when they are heated aboue measure, do seeme blacke about the skin: but dirt being full either of saltpeter, or other salt liquor, when the sun hath consumed his dregs and filth, doth become white. Againe, when the sun hath drawn and stirred vp the humiditie of the waxe, it is softned: but in dirt the sunne doth consume the humiditie, which is verie much, and so doth drie it and make it hard.

LXXXIII.

Why do not such as are sicke of the iaundise go to siege, and why is their excrement white?

Bicause that yellowe choler is spread ouer al their bodie, as their eies do shew, and their skin: for it doth not flowe into the inward parts, as by nature it should, and by that reason their excrements is not coloured, nor dooth not prouoke them to the stoole with his sharpnes, which in the guts it should do. And therefore Physicke imitating nature, as all other arts do, when the patient is in danger, doth helpe the part affected.

LXXXV.

Why haue such a very black skin for a time, which haue a continuall ague, after the time of iudgement, which the Phisitians do call Crisis?

That doth happen through continuall yellow choler, the which being burnt and adust by the rigour of the disease, is turned into blacke choler. And so in that time of iudgement, being driuen and repulsd by nature to the skinne it doth die it. As also the skin is white in leprosy: that colour is hardly dissolued, by reason of the thicknes of that humour.

LXXXVI.

Why doth blacke choler comming vnto the paps, or to the shanke, worke a corrosion, or gnawing or wasting, and in those

THE PROBLEMES

*which are called melancholy, it doth not worke the like, although
it flow into their braine?*

Bicause there are many great vaines in the pappes, by reason of ingendring of milke, and therefore store of that humour dooth runne thither. And likewise vnto the the shanke, bicause it goeth downwarde: but into the braine, bicause it is aboue, and also bicause it hath very small vaines, small store of choler dooth ascende, and which hath onely power and force to pricke, and not to gnaw and eate. Moreouer, the braine is cold & moist, whereby it is after a sort contrarie vnto the disposition of blacke choler, and dooth mollifie it. That therefore which is properly called blacke choler, dooth breed an eating and gnawing canker in the pappes: in the shanke, a bile or sore hard to bee cured, which of eating is called *Nomades*. In the braine it doth breede a mad fierce melancholy: but that which is not properly blacke choler, but a melancholy humour, causeth a swelling only which is like a canker, but doth not gnaw and eate, and dooth also breeda quiet and peaceable melancholy. LXXXVII.

Why doe those vessels which of the Greekes are called Baccalia, (a kinde of vessell or drinking glasse with a narrowe streit mouth) when they are filled with water, make a certaine noise proper vnto themselves, and thereupon haue their name giuen them, as other fained names of soundes, as in the water, Phloesthos, and such like?

Bicause that when such a vessell is without water, it is filled with aire, which is a most thin bodie. And therefore when water is on a sudden powred into it, with his heafte it dooth followe and beate out the aire which is thinne, and exclude it vtterly. For they cannot both stay in the glasse or vessell, vntill it be full. For the Philosophers doe shewe that two bodies cannot at one time possesse and occupie the same place. And therefore when

OF ALEXANDER.

when the aire is on a sudden thrust vpwarde through straites, a sound or noise is made of necessitie, and that not one but many, for then is as it were a fight betwixt both: for the water doth presse downe the aire, and the aire lifterth vp the water: and although this bee done successiuelly, yet there is often times a noise.

LXXXVIII.

What is the reason that when we put our finger on the mouth of a watering garden pottle, the water will not runne out at the bottome, and our finger being taken awaie, it runneth presently?

Bicause that when our finger is taken away from the mouth of the pot, the aire entring in dooth thrust downe the water, which of his owne nature doth goe downewarde, and so it goeth out at the bottome. And this is the reason of all mechanickall engins and instruments made by aire and water, as clocks and houre glasses made by water.

LXXXIX.

Why doth both wine and water giuen out of season vnto the sick of an ague, cause a great distemperature of the braine: for these two are contrarie, for the water is cold, and the wine hot?

I say then that the wine being apt to ascende, doth burne the braine, at the time that it is disturbed and distempered with the ague. And wee see also many which are in health, if they vse much wine, to bee skarse well in their wits. But water dooth stoppe the passages of the bodie, by which the spirits (which are the instruments of the soule) are dissolued, and so cause them to become more thick and grosse, and more corrupt and putrified, which breedeth the ague. And oftentimes water being overcome by the ague, becometh his nourishment. As we see in a smithes forge, where a little water dooth kindle the fire, and make it flame more.

THE PROBLEMES

XC.

Why haue women and children and gelded men shrill and lowd voices?

Bicause through abundance of humiditie, their arterie is not stretched wide. And therefore as a small flute or pipe giueth a small slender sounde, so the arterie in them which is streite and narrow: for it is the properie of heate to make wide and loose, and women and Eunuches be cold.

XC I.

Why are children firooken with a planet in the summer?

They are sicke of a weake and lingering ague, and their eies sinke hollow in their head, and they become weake and feeble, and sleepe very little. And some of them haue a flixe, bicause children are tender and easily suffer, and haue great store of fleume in the head, as we haue said. And therefore the fleume being ouer much heated with great heats, and also putrified, doth inflame an ague. Whereupon the gristles of the braine are set on fire, and therefore they sleepe little: and that fire descending by the arteries to the hart, and setting on fire the liuely spirits, dooth kindle an ague without putrefaction. And seeing that much choler riseth of an ague, thereby it falleth out, that that choler gnawing and eating the belly and guts, the flixe, or running of the belly ariseth. It is most plaine, that the cause of that alteration is in the braine, bicause that cooling medicines are applied vnto the head, & such as are good to quench that fire. And some of ripe yeeres are sicke of the same disease, that is, such as haue fleum or some choler heaped in the head, which doth putrifie. By the very breathing therefore, and after a maner by the fire aire, the spirits are set on fire.

XCII.

Why are round ulcers or biles hard to be cured?

Bicause

OF ALEXANDER.

Bicause they breed of sharpe choler, and which hath a force of eating and gnawing. And bicause it doth run dropping and gnawing, it dooth make a rounde vlcere: & for that caule it requireth medicaments which dry & burn. And this the phisitions do speak. The natural Philosophers do say, it cometh to passe, bicause there is no beginning where that mischieuous impostume dooth begin. For in a circle there is neither beginning nor end, and when they are burned by the Phisition, then they take another shape.

XCII.

Why is hony sweete vnto all men, and yet seemeth bitter vnto such as haue the iauundise?

Bicause they haue much bitter choler ouer all the bodie, and which aboundeth in the roong. And therefore it happeneth when they doe eate honey, that the humour is stirred: and the taste it selfe when it hath felt the bitternes of choler, breedeth an imagination that the honey is bitter.

XCIII.

Why haue very angrie men fire eies?

Bicause the blood about his hart is feruent, and his spirits hot. And therefore these spirits being very subtile and pure, are carried vpward, and by the eies which are cleere, they shine, and haue bloody vapours ascending with them. And thereupon their face appeereth red: which *Homer* not being ignorant of saith: And his eies were like a burning flame.

XCIV.

Why doth water cast vpon Serpents cause them to flee?

Bicause they are colde by nature, and dry, and haue but little blood, and therefore they do flee from excessive coldnes. And that they be of this qualitie it appeereth, bicause they seeke for dens and secret places of the earth in winter, as being warme places. And at sun

THE PROBLEMES

set, they flee the aire for the most part as colde: and againe in summer, bicause the bowels of the earth are cold, they flee from them, and go vnto hot places.

XCVI.

Why doth an egge breake if he be roasted, and neuer breake if he be sod in water?

Bicause that when his moistnes commeth neere vnto the fire, he doth heate ouer much, and is burned, & thereby doth breede much winde, the which through the straitnes of the place, doth seeke a waie out, and so breaking the shell doth flee out. The like is in tubbes and earthen vessels when new wine doth boile in them. Also to much flame doth breake the shell of an egge in roasting: which doth also happen vnto earthen pots ouer much heated and burnt. And therefore the common people do wet an egge which they purpose to roste. Hot water through his softnes doth separate the humiditie by little and little, and doth dissolue it through the thinnesse and passages which are in the shell.

XC VII.

Why do men in the act of carnall copulation after a sore winke, and suffer such like alteration in the other senses?

Bicaule they being overcome with the affect of that pleasure, they do comprehend it the better, as it were winking with their eies. They are not lifted vp, nor do not carrie the minde abroad into the aire with the senses, whereby they should lesse feele those corporall affections.

XC VIII.

Why haue some medicines of one kinde contrarie force, as experience doth teach: Mustick doth expell, dissolue, and knit; Vineger doth both coole and heate?

Bicause there are some small indiuisible bodies in them, not by confusion, but by interposition. As sand moistened

OF ALEXANDER.

moistened doth clod together, and seemeth to be but one substance or bodie, but in truth there are manie small bodies in the sand. If this be so it is not absurd, that contrarie qualities and vertues should be hidden in Masticke in diuers parts of it, and not confounded with it, bicause that nature hath giuen that lawe vnto those bodies.

XCIX.

Why doth our priuie member swell, when we hurt one of our toes.

Bicause that nature, prouiding for those things which belong vnto the body, doth speede to helpe those parts which are grieued. And bicause she hath the most profitable, and nourishing of all the humours for hir wagon, it is requisite when she doth descend vnto the toe, together with the blood, that those vaines bee filled which are about the priuie member, and those parts which are about those vessels which are called *Adenes* of the Greekes, which are little round kernels. Therefore an immoderate constipation doth cause inflammation and standing vp: and that priuie member is called *Inguen*, borrowing his denomination of the place it selfe.

C.

Why hath not nature giuen birds a bladder for a receptacle of urine and kidneis?

Bicause they did want much moisture to giue matter for feathers to growe, and that also they doe consume with the exercise of fleeing. Neither do they pisse at all: & when they drinke, they voide very moist dung.

CL.

Why haue children grauell breeding in their bladder, and old men in the kidneis and raines of the backe?

Bicause children haue strait passages in the kidneis: and an earthly and thick humor is thrust with violence
by

THE PROBLEMES

by the vrine from the kidneis, and from those receptacles which are made of the fashion of the Moone, euen into the bladder of the vrine. The bladder hauing wide conduits and passages, giueth roome to the vrine to go out, and also place to the humour, whereof the grauell is ingendred, to waxe thicke and seate it selfe, as the custome of it is. But in old men it is contrarie, for they haue large and wide passages of the raines of the backe and kidneis, whereof it commeth to passe, that the vrine may passe away, and the earthly humor congeale and sinke downe. The colour of the stone doth shew the humour whereof the stone doth rise.

CIL

Why if the stone do congeale and waxe hard through heate (children are hot) and by the same reason it is done in old men: for there is not so much cold to be graunted as there is in yce or snow: for with extreame cold the kidneis would perish, yet we do not see contrary things to dissolue the coldnes, but like things, that is, hot things, as persley, fennell, and such like?

They saie then that it falleth out, that by exustion, parching and scorching, the stone doth crumble into small sand: As it is in earthen vessels, which when they are ouer heated and tosted, they become sand. And by this meanes it falleth out, that small stones are voided together with small sand in making of water. And sotime it falleth out that cold drinckes do thrust out the stone, the kidneis being stretched and casting it out, by a great laske, by vertue of easing the belly of his burthen. And besides this it falleth out, that an immoderate heate of the kidneis or raines of the backe, by reason whereof the stone doth growe, is quenched with coldnes.

CIII.

Why is the curing of an vicer or byle very hard in the kidneis or bladder?

Bicause

OF ALEXANDER.

Bicause that the vrine being sharpe, doth exulcerate the wound, which good and fit medicaments do couer and skin. Vlcers are harder to be cured in the bladder, then in the kidneis, bicause the vrine doth staie in the bladder, and doth run away from the kidneis.

CIIII.

What is the reason that in bathing vessels, the hot water when it is stirred, doth seeme more hot vnto vs, and almost burne our bodies?

Bicause that when we go downe into those baths, the water it selfe doth suffer, that is, when the water doth heat our bodies, the water after a sort is made colde by vs. We haue learned, that whatsoever doth worke in generation and corruption, the self same without al doubt doth suffer. The water then being in some sort cooled, doth not heate alike, and we being accustomed vnto it, do not feeble the heate as we did in the beginning, because that the immoderate heate of it is diminished. If then stirring the hot water, more faire hot water be added vnto it, which neither hath yet wrought, nor suffered any thing of the body which is in the water, that wil seeme very hot and skalding, in respect that working it doth also suffer, and by little and little lose his heate, as the first did.

CV.

How is it, if whaisoeuer be mooued, is the hotter for it, and especially in a hot aire and place, yet when the aire is beaten and stirred, is doth seeme the colder vnto vs, and especially in summer, when the heate of the sunne is most hot?

For this doth seeme contrary vnto the other: for hot water did seeme hotter vnto vs by moouing it, & heere the hot aire dooth seeme colder when it is stirred and moped. I say therefore that it is a common thing, that that which is most and principallest in any thing, either in qualitie or vertue, doth ouercome and chaunge that

THE PROBLEMES

that which is lesser & weaker, & that which is the stronger doth somewhat suffer againe in doing. Therefore the hot water when it is verie hot, sticking vnto the hot bodie, is somewhat cooled, and doth not keepe the same qualitie. The aire then which doth compass vs about, being hot in summer, like vnto the water, compassing our bodies, is heated somewhat by vs, which are hot through the heate of the time of the yeere, and doth likewise againe heate vs: As linnen garments do, the which being first cold, then being made hot by vs, do then heate vs againe. When wee do then stir the aire, that ayre which was before heated by vs is driuen away, and another which is not as yet heated doth succcede, which seemeth cold vnto vs.

CVI.

Why do those sores which breed in the ball of the eie seeme white, when they have left growing and are old, and others do not seeme such which growe out of the ball?

Bicause that through the ball of the eie onely the spirit of seeing doth go out, the which is bright & cleere. Therefore in the white of the eie, when the wound doth make thicke the passage of the couering of the eyes which is like a horne, the spirit of sight cannot issue out, whereof it commeth to passe, that much of it being there gathered together, it doth make the wound light and cleere, and shewe the wound white. And bicause that by reason of the thickening of the sight the spirit cannot go out, it falleth out that they cannot see.

CVII.

Why do chaffe and strawe keepe water hot, and snowe colde which are contraries in qualitie?

Bicause the nature of chaffe doth want a manifest qualitie, and is said of some to be without qualitie. Seeing therefore that of their owne nature, they can easily be

OF ALEXANDER.

be mingled and confused with that which they are next vnto, they easily also take the same nature vnto them. And therefore being put vnto hot things, they are easily hot, and do heate againe, and keepe hot: and contrarie being made colde of the snow, and making the snow colde, do keepe his coldnes. So waxe and oile will easily be consumed, and made one with another thing, and are also without qualirie, and do helpe the qualitie of that which is mingled with them, as being made one with them.

CVIII.

Why do the stars and heavens seeme cleereft in the bright winter time?

Bicause the aire, either which doth compasse vs, or that which is higher, is made thinne and purged with windes and showers of raine, and by that meanes our sight doth see both further and cleerer. The like is manifestly seene in running riuers: for such things as are in them are farre better seene, then in thicke puddle standing water, where either nothing is seene, or confusedly.

CIX.

Why haue we oftentimes a paine, and do quake in making of water?

Bicause that sharpe choler issuing out, and pricking the bladder of vrine, doth prouoke and stirre vp the whole bodie to ease the part offended, and to expel the humour moderately. This doth happen most of all vnto children, bicause they haue most excrements, by reason of their often filling.

CX.

Wherefore are griefes greater in the night, then in the day?

Bicause the minde being then idle and at rest with himselfe, is neither busied with the sight nor hearing, nor occupied with any other sence, & doth nothing at all,

THE PROBLEMES

all, nor is not vrged to any externall action, and thereupon is much more touched with the feeling of anie trouble or griefe. It is very plaine that the minde doth lesse feelee griefes of the bodie, when he is drawn abroad to externall works, seeing that in sicknes and other such accidents, the companie and familiaritie of friends, and communication and tales telling, do make their troubles and griefes more light and tolerable. Men haue marked that nature doth least work by daie, in digestion of meates, in altring of humours, in making of blood, in growing, and such like operations. But the minde is then most occupied in his actions, as in the five sences, in motions of the parts of the bodie, in imagination, in thought, in memorie: and contrarie in the night, then nature worketh most, and the minde least.

CXI.

Why doth a glasse breake in the winter, if you powre any very hot liquor into him?

Bicause that it is throughly affected and alired, by reason of the coldnes of the aire which doth compassie it. And therefore when we powre in very hot water on a sudden, and not heate the glasse before, the heat doth fight and strive with the cold which was in it: the cold with the aire presently fleeing, causeth the breaking of the glasse. It must be granted, that there be certaine small holes and passages in the glasse, which do holde and receiue the purest and thinnest parts of the aire, the which although we do not see with our eies, and with sence, yet we cannot denie but by nature there they be. Others do say, that bicause the glasse is verie cold, then it is very drie also, and therefore that which is the subtilest part in it, whether it be a humour or the aire, is thrust out, and doth as it were vanish away, and so is made apt to breake. And so it is in verie dry wood.
And

OF ALEXANDER.

And so *Hippocrates* did say, that the vaines were broken with cold. That therefore which is very hot, finding the glasse to be such, drying it more and more, dooth cause him to breake. If it had beene before wet ouer, and heated a little, it would not haue beene hurt: as wee see wraistlers annointed before they go to wraistle. For whē drines falleth into those passages and inuisible holes, it fleeth quickly with the aire, and the softnes of the glasse giuing place vnto the heate, doth not easily breake. It is easily seen that glasse hath those passages, by earthen pots, into which if you powre water, and dawbe them with pitch, yet the humour will woole out. You may also see in winter time a smoake or fume breake out of a glasse, when you cast water into him.

CXII.

Why are not children and especially infants, so easily shaken and put out of ioint, as men?

By reason of their softnes, yeelding vnto the earth, they do dissolue his hardnes, that it can worke no further. Men therefore, hauing a hard bodie, bicause they do resist the hardnes of the earth or stone, they doe increase the vehemencie of the blowe, and doe force the stone to worke against themselves, as being hard themselves. And for the same reason a sponge yeelding is not broken: but a glasse, an earthen pottle, or any such other hard bodie is broken with a fall. And by this also we learne why a vehement blast of winde dooth overthrowe an oake, and not a reede, bicause that an oake being hard and strong and great, doth resist the winde, and so make his force more strong: but the reede being light and soft and small, yeelding hither and thither to the winde, doth breake his force. So a wraistler struing against his companion doth increase his force, & yeelding sometimes, and bowing with him, dooth sooner breake his vehemencie.

Why

THE PROBLEMES

CXIII.

Why do infants hearing the nurses singing, cease their crying, and sleepe presently after?

Bicause that the substance of musicke, as being a science (and all other arts) is engrafted naturally in the minde, as heate is in fire. As *Plato* doth say, our mindes do remember sciences and not learne them. And therefore the minde hearing such a song, in that that hee doth remember, causeth the infant to be quiet, and in that that he taketh pleasure it doth draw on sleepe. For not being infected with the companie of the bodie, he perceiueth those sciences verie plainly, and being somewhat drown'd in the bodie, falleth into some obliuion of them.

CXIIII.

Why do nurses rocke and mooue children when they would draw them to sleepe?

To the end that the humors being scattered by moouing, may mooue the braine: but those of more yeeres cannot endure this.

CXV.

Why do some drunkards see double?

Bicause that the muscles of the eies being more or lesse filled, and by the selfe same meanes weake and feeble, do draw and wrest one eie vpward, and the other downward: and by that meanes the eie beames do not looke one way at once, but towards diuers places and bodies: and therefore each of the eies vsing a priuate office and dutie of seeing, doth cause a double sight.

CXVI.

Why are boyes apt to change their voice about fourteene yeeres of age?

Bicause that then nature doth cause a great and sudden change of age. Experience proueth this to be true:

OF ALEXANDER.

true: for at that time we may see that womens paps do grow great, to hold and gather milke, and also those places which are about the hips, in which the yong fruit should remaine. Likewise mens breasts and shoulders which then beare great and heauie burthens. Also their stones in which the seed may increase and abide: and his priue member, to let out the seede with ease. Further al the whole bodie is made bigger and dilated, as the alteration and change of euery part doth testifie. And the harshnes of the voice and hoarsenes: for the rough arterie or windepipes being made wide in the beginning, and the exterior or outward part within vnequall euen to the throte, the aire going out at that rough vnequal and vneuen pipe, doth become vnequal and sharpe, and after a sort hoarse. Like vnto the voice of a goate, whereof it hath his name *Branchus*. The same doth happen vnto them into whose rough arterie anie distillation doth flowe. It happeneth by reason of the dropping humiditie, that a light small skinned vnequally, causeth an vneuen going forth of the spirit & aire. Vnderstand that the windepipes of goates is such, by reason of the abundance of humiditie. The like doth happen vnto all such, as nature hath giuen a rough arterie, as vnto Cranes. After the yeeres of fowrtene they leaue off that voice, because the arterie is made wider, and receiueth his naturall euenesse and equalitie.

CXVII.

Why doth oyle being drunke, cause vs to vomit, and especially yellow choler?

Because that seeing it is light, and ascendeth vpward, it prouoketh the nutriment in the stomacke, and listeth it vp. And so the stomacke being grieued, summoneth the eiectiue vertue to vomite, and especially choler, because that it is light, and consisteth of subtile parts,

M

and

THE PROBLEMES

and therefore is the sooner conueied vpward. And it is most plaine that oyle is light and carried vwarde: for when it is mingled with any moist thing, it runneth vnto the highest roome.

CXVIII.

Why doth not oyle mingle with moist things?

Bicause that being phiant, soft, and constipat in it selfe, it cannot be diuided into parts, and so it cannot be mingled. Neither if it be cast vpon the earth, can it quickly enter into it.

CXIX.

Why is water and oyle frozen in cold, wine and vineger not?

Bicause that oyle being without all qualitie, and fit to be confounded with any thing, is cold quickly, and so extreemly, that it is most cold. Water being cold of nature, doth easily freeze, when it is made colder then his owne nature. Wine being hot and of subtile parts, is not so soone colde. But vineger being of most subtile parts, suffereth no freezing.

CXX.

Why do contrary things in qualitie, bring forth the same effects?

That which is moist, is hardened and bound alike of heate and of colde: snowe and liquor do freeze with colde: a plsister and the grauell in the bladder, are made hard with heate. That is so in deede, but by a diuers action. The heate doth consume and eate the aboundance of moisture: but the colde stopping and shutting, with his ouermuch thicknes, doth wring out the filthie humiditie: like as a sponge, wrung with the hand, doth cast out the water which it hath in his pores and small passages.

CXXI.

Why doth a shaking or quivering cease oftentimes when any fearefull matter doth chaunce, as a great noise or cracke made with

OF ALEXANDER.

with sudden downfall of water, or greas tree?

Bicause that oftentimes the humours being digested and consumed with time, and made thinne and weake, all the heate, vehemently and suddenly, and sharpelie fleeing into the inward parts of the bodie, consuming the humour which causeth the disease, doth dissolve it. Treacle hath this effect and many such like, which are hot and drie, when they are taken after concoction.

CXXII.

Why do such fall which turne rounde, if they be not used to do it?

Bicause they do disturbe the animall spirits which are in the braine, andASSE tossethem vp and down together with humidities. They then be made lesse apt and fit to receiue the sensible and motiue power, and do not suffer any action to go into the muscles and sinewes: whereby it falleth out, that the waight of the bodie, as not being borne vp nor supported by the soule, is throwne to the earth: and for the same cause they see darknes, bicause the spirit of seeing is disturbed and troubled, & cannot work like to the other senses. But this doth not happen vnto such as are accustomed to turne moderately, and by little and little. Custome doth breedethis: for the soule and nature are not strangers the one to the other, but in time are as it were reconciled. For that which is done by little and by little, and without intercession, is hidden from the sense. And after that it hath often escaped, falleth not as a strange thing vnto nature, who was wont to receiue it.

CXXIII.

Why do Steele glasses shine so cleerely?

Bicause they are lined on the inside with white leade, whose nature is shining, the which being put to the glas which is also shining, doth shine much more, & casting his beames through the passages of the glasse, doth

THE PROBLEMES

double that which is in the superficial part of the glasse, and without the body of the glasse, and by that meanes the glasse is very shining and cleere.

CXXIIII.

Why do we see our selues in glasse and cleere waters?

Bicause that the qualitie of the sight passing vnto cleer bright bodies, by a reflexion doth return again by the beams of the eyes, to the image of him who looketh on it. That qualities do go forth and passe from the face, as is not absurd, they do shew, which remain neere vnto trees, bicause they are wont to looke greene. For the greene quality of greene leaues, passeth to the face it selfe: likewise going into the running water, doth make it to shew greene.

CXXV.

Why doth hard dens, and hollow places, and high places, send backe the likenes and sound of the voice?

Bicause that such places also, by a reflexion do sende backe the image of a sound. For the voice doth beate the aire, the aire the place, the which the more it is beaten, the more it doth beate, and thereby doth cause the more vehement sound of the voice. Moist places, and as it were soft, yeelding vnto the stroake, and dissolving it, giue no sounde againe. For according vnto the qualitie and quantitie of the stroake, the qualitie and quantitie of the voice is giuen, which is called an *Eccho*. Some do idley fable that she is a goddesse: some saie that *Pan* was in loue with hir, which without doubt is false. He was some wise man who did first desire and search out the cause of that voice: and as they which loue and cannot enioy their loue are grieued, so in like maner was he very sorie vntill he found out the solution of that cause. As *Endymion* also who first founde out the course of the Moone, watching nights, and obseruing hir course, and searching hir motion, did sleepe in
the

OF ALEXANDER.

the day time. And therefore they do fable that he was beloued of the Moone, and that she came to him when he was a sleepe, bicause she did giue vnto the Philosopher, the solution of the cause of hir selfe. They say also that he was a shepheard, bicause that in deserts and high places he did marke the course of the Moone. And they giue him also a pipe, bicause that high places are blowen with wind: or else bicause he sought out the consonancie of figures. *Prometheus* also being a wise man, sought out the cause of the starre which is called the *Ægle* in the firmament, his nature and place, and when he was as it were wasted away with the desire of learning, then at the last hee rested, when *Hercules* did dissolue vnto him all doubts with his wisdom.

CXXVI.

What is the reason that if you cast a stone into a standing water which is on the ouermost part of the earth, it maketh manie circles, and not if the water be deepe in the earth?

Bicause that the stone with vehemencie of the cast, doth pursue and followe the water from euery part of it, vntill the stone come to the bottome. But if there be a very great vehemencie in the throwe, the circle is the greater, the stone going downe vnto the earth, and drawing downe the water with it, causeth manie circles. For first of all it doth driue the ouermost and superficiall part of the water into many parts, & so going down alwaies vnto the bottome, againe diuiding the water, it maketh another circle. And this is done successuely, vntill the stone resteth. And bicause the vehemencie of the stone is slackned stil as he goeth down, of necessitie the last circle is lesser then the first, bicause that with the stone and also with the blow, the water is diuided.

CXXVII.

Why do some thinke that laughter proceedeth from the

THE PROBLEMES

Spleene, affirming that it is not like, that they laugh not much, whose spleene is corrupted, as they do whose spleene is sounde, but say that such are very sad?

Truly I thinke that the cause of laughter is accidentally, and not properly in the spleene: for if it be sound and perfect, it doth draw from the liuer all melancholy humour. Whereof it proceedeth, that when the pure blood without any dregs doth goe both throughout all the bodie, and also into the braine, it doth delight both nature and the minde, and doth make men merrie like vnto wine, and bring men to a quietnes and tranquillity, and so of that laughter is mooued.

CXXVIII.

Why do not Mules bring forth young ones?

Bicause they do consist of a diuers kinde of beasts, and so then the mixtion of seede differing in qualitie and quantitie, begetting a certaine other thing besides that which is first, doth marre and abolish the nature of those things which first were. As the mingling of white and black, abolishing the colour of the extreames, breedeth another colour which is darke and dunne, which is none at all of the extreames. Therefore the ingendring qualitie is abolished, and the aptnes of receiuing formes.

CXXIX.

Why are such as are deafe by nature dumme also?

Bicause they cannot speake, and expresse that which they neuer hard. Some Physitions do say, that there is one knitting and vnitng of sinewes belonging vnto the tongue and to the eares, and therefore they are of the like disposition. But such as are dumme by an accident, are not deafe at all, for there then riseth a locall passion.

CXXX.

Why are some stiffe after meats which were long fasting?

Bicause

OF ALEXANDER.

Bicause they abound with choler, and so do heape vp a lowre sharpe humour. Therefore the parts of the bodie being nourished after meate, driue away from them the choler vnto the skin, and so that stiffenes doth rise, that is, the choler gnawing and biting those parts, and stirring them vp to pursue himselfe.

CXXXI.

Why do not swine cry when they be carried with their snouts upward?

Bicause that aboue all other beasts they bende more the other to the earth. They delight in filth, & that they seeke: and therefore in that sudden change of their face, they be as it were strangers, and being amazed with so much light, keepe that silence. Some say that their windpipe doth close together, by reason of the straitnes of it, when they lie with their face vpward.

CXXXII.

Why are swine delighted with dirt?

As the Phisitions do say, they are naturally delighted with it, bicause they haue a great liuer, in which desire is. Aristotle saith, that the widenes of his snout is the cause: for he hath a smelling which doth dissolue it selfe, and as it were striving with stinck.

CXXXIII.

Why doth itching rise, when an ulcer doth waxe whole, and paine cease?

Bicause the part which is healed and made sounde, doth pursue the reliques of the humour, which remaineth there against nature, and which was the cause of the boile: and so going out through the skin, and dissolving it selfe, doth cause the itch.

CXXXIII.

Why are those diseases or accidents longest and most grievous, which do molest one eie onely, and not both?

For two causes: bicause the running or fluxion is heaped

THE PROBLEMES

ped vp at one eie onely: for whatsoeuer is diuided into many, is weaker then it selfe, and of lesser strength: or els bicause that when the whole eie doth moue himself in his actions, so oft he doth force the sicke eie to moue also: and the medicaments of euery diseased part doth consist in quietnes.

CXXXV.

Why doth man sneeze more ofner, and more vehemently then other beasts?

Bicause he doth vse more meates and drinkes, and of more diuers sorts, and that more then is requisite, the which when he cannot digest as he would, it doth gather together much aire and spirits, by reason of much humiditie: that spirit then being very subtile, ascending vnto the head, it forceth a man oft to auoide it, & so causeth sneezing. And it maketh a noise, bicause a vehement spirit or breath passeth through the conduites of the nostrils, as a belching by the stomacke, or a fart from the belly, the voice by the throte, and a sound by the eares.

CXXXVI.

Why do dead mens haire and nailes grow for a time?

Bicause that the flesh rotting, withering, and falling away, that flesh which was hidden about the roots of the haire, doth now appeere and deceiue, and cause an imagination that the haire did grow. And some say that ingroweth in very deece, bicause that dead carcasses are resolued in the beginnig into many excrements & superfluities, by reason of the putrefaction which cometh vnto them. These going out to the ouermost part of the bodie, by some passages & pores, doe increase the growing of the foresaid haire.

CXXXVII.

Why haue children rather then men certaine white spots in the nailes of their fingers, rather then in their toes?

Bicause

OF ALEXANDER.

Bicause they do breed of fleume, and children doe abound with fleume more then men, bicause they are fatter and greater eaters. And the feet by reason of walking and motion, doe dissolue superfluities more then the hands: and therefore those spots do not appeere in the nailes of the feete.

CXXXVIII.

Why doth not the haire in the feet quickly grow gray?

For the same reason, bicause that through great moouing and walking, they do disperse and dissolue the superfluitie of fleume, which doth breed graynes. And the haire of the secret parts doth growe gray very late, bicause of the heat of that place, and bicause that in carnall copulation it doth dissolue fleume also.

CXXXIX.

Why doe very many beasts wag their taitles when they see their friends, and a lion and a bull beate their side, when they are angrie?

Bicause they haue the marrowe of the blacke reaching vnto the taile, which hath the force of moouing in it. The imagination acknowledging that which is knowen vnto him, as it were with a hand, as it doth happen in men, doth force them to mooue the taile, which doth manifestly shew some secret force to bee within the, which doth acknowledg that which they ought. In the anger of lions & bulls, nature doth consent vnto the minde, and doth inforce it to be greatly mooued, as men doe sometimes when they be angrie, beate their hands or other parts. When the minde cannot reuenge vpon that which doth hurt, it doth presently seeke out some other solace, and doth cure his affection with some stroake or blow.

CXL.

Why if you do put dry burns barly vpon a horses sore, the haire which groweth on the sore is not white, but like the other haire?

Bicause

THE PROBLEMES

ped vp at one eie onely: for whatsoeuer is diuided into many, is weaker then it selfe, and of lesfer strength: or els bicause that when the whole eie doth moue himself in his actions, so oft he doth force the sicke eie to moue also: and the medicaments of euery diseased part doth consist in quietnes.

CXXXV.

Why doth man sneeze more oftner, and more vehemently then other beasts?

Bicause he doth vse more meates and drinkes, and of more diuers sorts, and that more then is requisite, the which when he cannot digest as he would, it doth gather together much aire and spirits, by reason of much humiditie: that spirit then being very subtile, ascending vnto the head, it forceth a man oft to auoide it, & so causeth sneezing. And it maketh a noise, bicause a vehement spirit or breath passeth through the conduites of the nostrils, as a belching by the stomacke, or a fart from the belly, the voice by the throte, and a sound by the eares.

CXXXVI.

Why do dead mens haire and nailes grow for a time?

Bicause that the flesh rotting, withering, and falling away, that flesh which was hidden about the roots of the haire, doth now appeere and deceiue, and cause an imagination that the haire did grow. And some say that it groweth in very deece, bicause that dead carcasses are resolu'd in the beginnig into many excrements & superfluities, by reason of the putrefaction which cometh vnto them. These going out to the ouermost part of the bodie, by some passages & pores, doe increase the growing of the foresaid haire.

CXXXVII.

Why haue children rather then men certaine white spots in the nailes of their fingers rather then in their toes?

Bicause

OF ALEXANDER.

Bicause they do breed of fleume, and children doe abound with fleume more then men, bicause they are fatter and greater eaters. And the feet by reason of walking and motion, doe dissolue superfluities more then the hands: and therefore those spots do not appeere in the nailes of the feete.

CXXXVIII.

Why doth not the haire in the feet quickly grow gray?

For the same reason, bicause that through great moouing and walking, they do disperse and dissolue the superfluitie of fleume, which doth breed graynes. And the haire of the secret parts doth growe gray very late, bicause of the heat of that place, and bicause that in carnall copulation it doth dissolue fleume also.

CXXXIX.

Why doe very many beasts wag their tailes when they see their friends, and a lion and a bull beate their side, when they are angrie?

Bicause they haue the marrowe of the blacke reaching vnto the taile, which hath the force of moouing in it. The imagination acknowledging that which is knowen vnto him, as it were with a hand, as it doth happen in men, doth force them to mooue the taile, which doth manifestly shew some secret force to bee within the, which doth acknowledg that which they ought. In the anger of lions & bulls, nature doth consent vnto the minde, and doth inforce it to be greatly mooued, as men doe sometimes when they be angrie, beate their hands or other parts. When the minde cannot reuenge vpon that which doth hurt, it doth presently seeke out some other solace, and doth cure his affection with some stroake or blow.

CXL.

Why if you do put dry burns barly vpon a horses sore, the haire which groweth on the sore is not white, but like the other haire?

Bicause

THE PROBLEMES

Bicause it hath the force of expelling, and doth wipe away and dissolue the excrement of fleume, and all vnprofitable operation which is gathered together, through the weaknes of the part, or cruditie of the sore.

CXLI.

Why doth haire neuer grow in mans vlcers or biles?

Bicause a man hath a thicke skin, as it is seene by the softnes and thinnes of his haire. And seeing the skarre is thicker then the skin it selfe, it doth stop vp the passages, by which the haire should growe. Horses haue thinner skins, as it is seene by their thicke haire, and therefore all passages are not stopped in their wounds, and sores. And after that the excrements which were gathered together, haue broken a passage through those small pores, the haire doth grow.

CXLII.

What is the reason that such as are bitten with a snake, being most exceedingly a thirst, do quench their thirst, and not increase it, by drinking of treacle, which is dry and hot?

It saie then that it doth not quench the thirst, by reason of his qualitie, but by some mutuall sympathie and consent, & naturall reason. That is a kind of counterpoison and preseruatiue which is made of diuers sorts of hearbes, which haue some kinde of consent & agreement with all the parts of the body. As Dictamum, Detander, or garden ginger, hath a propertie conseruatiue of the hart, Agrimonie or Liuerwoort, with the liuer, Stonewoort or finger ferne with the spleene, Parsley with the mouth of the belly, Hyssope with the lungs, Elicampane with the reins of the backe, Rue with the neck, Bitterwoort with the brain, & *Siler maritimum* with the bladder of vrine. Euerie one of these drawne as it were with the sweetnes of honey, doth draw that which is best for his safety. Amongst all which, the flesh of some vipers is mingled, which hath a certain mutual affectio which

OF ALEXANDER.

which we call Antipathiam, a contrarietie of naturall qualities, against euery venemous beast and corruptible vertue. These being distributed into euery part, they suffer not to work that effect, which doth threaten corruption. For they do resist like vnto lawfull soldiers, who haue taken armes for the defence of their countrey.

CXLIIL

Why is fortune painted with a double forehead, the one side bald, and the other hairie?

The balde side signifieth aduersitie, and the hairie prosperitie, which we enioie when it pleaseth hir.

CXLIIII.

Why haue some commended flatterie?

Bicause flatterie setteth soorth before our eies, that which wee ought to be, although not, that which we be.

CXLV.

Wherefore should Vertue be painted girded?

To declare that vertuous men ought not to be slothfull, but diligent, and alwaies in action.

CXLVI.

Why did the ancients saie that it was better so fall into the hands of a Rauens then of a flatterer?

Bicause Rauens do not eate vs vntill we be dead, but flatterers do deuour vs aliue.

CXLVII.

Why haue cholericke men beards before others?

Bicause they are hot, and their pores large and wide.

CXLVIII.

Whereof doth it proceede that such as haue the hicket, do ease themselves by retaining their breath?

The breath retained doth heate the interior parts of the bodie, and the hicket proceedeth of nothing else but of cold.

CXLIX.

THE PROBLEMS

CXLIX.

Whereof doth it proceed, that old men remember wel that which they haue scene and done in their youth, and do forget such things as they see and do in their age?

Things learned in youth, haue already taken a certain roote and habitude in the person: but things learned in age are forgotten, bicause the senses are weakened in them.

CL.

What kinde of couetousnes is best?

The couetousnes of time, when it is employed as it ought to be.

CLI.

Why is our life compared vnto a stage plaie?

Bicause the vn honest do occupie the place of the honest, and the woorst sort the roome of the good.

CLII.

Why do Dolphins, when they appeere about the water, signifie some storme or tempest to come?

Bicause that at the beginning of the tempest there do rise from the bottom of the sea certaine hot exhalations and vapors, which doe heat the Dolphins, which doth cause them to mount to seeke for cold.

CLIII.

Wherefore are things more quiet in the night, then in the day?

The motion of the aire and the coldnes of the night is the cause thereof, which coldnes doth stay and hinder the motion.

CLIIII.

Wherefore did the Romaines call Fabius Maximus the target of the people, and Marcellus the sword?

Bicause the one gaue himselfe to maintain the common wealth, and the other was eger and sharpe to reuenge the enemies of his countrey. And yet they were
by

OF ALEXANDER.

by the Senate ioined together, bicause the grauitie of the one should moderate the courage and boldnes of the other.

CLV.

Why doth the shining of the moone hurt the head?

Bicause it mooueth the humours of the braine, and cannot afterward resolue them.

CLVI.

If water do not nourish, why do men drinke it?

Water causeth the nutriment to spread throughout all the bodie.

CLVII.

Why is sneezing good?

To purge the braine, as the milke is purged by the cough.

CLVIII.

What is the seate of the affections in the bodie?

Ioy dwelleth in the spleen, anger in the gaule, fear in the hart, lechery in the liuer.

CLIX.

Why is sodden water better then colde?

Boild or sodden water hath lesse ventosities, and is more light and subtile, bicause the earth and heauie substance is separated from it.

CLX.

Wherefore are the waters of marishes and ponds still?

Bicause they are flegmatike and do corrupt in some time, bicause the finest of the water is conuerted into vapours, and the earthines doth remaine.

CLXI.

Why be studious and learned men soone bald?

It proceedeth of the weaknes of their spirits, or bicause want of digestion causeth fleame to abounde in them.

CLXII.

THE PROBLEMES

CLXII.

Why doth too long watching make the braine feeble?

Bicause it doth multiplie choler, the which by that meanes doth drie and extenuate vs.

CLXIII.

Why be Steele glasses better for the sight then other glasses?

Bicause Steele is harder, and doth represent vnto vs more substantially the aire which receiueth the light.

CLXIII.

Whether doth loue shew his greatest force, either in making the foole to become wise, or the wise to become a foole?

In giuing wisdom to him which hath it not, bicause it is more hard to build then to pul downe, bicause that ordinarily loue and follie are but an alienation of the minde.

CLXV.

Why is ouer great labour nought for the sight?

Bicause it drieth the blood too much.

CXLVI.

Why is goates milke accompted best for the stomacke?

Bicause it is thicke, and not slimie, bicause they feed on bowes and wood rather then on grasse.

CXLVII.

Why doth too much griefe and vexation bring age?

Bicause it drieth, & age is nothing else but a drought.

CXLVIII.

Why is he most meriest who hath the thickest blood?

The blood which is fat and thicke, maketh the spirits firme and constant, wherein consisteth the force of all creatures.

CLXIX.

In your opinion which is hardest to obtaine the loue of one, or to keepe it being obtained?

To keepe and maintaine it being gotten, by reason of the inconstancie of women, which are quickly angrie
and

OF ALEXANDER.

and soone wearie of one, lightly found and slipperie to keepe.

CLXX.

Why do Serpents flee from the hearbe called Rue?

Bicause a Serpent is cold, drie and full of sinewes, & the hearb Rue of a contrarie nature.

CLXXI.

Why is a Capon better to be eaten then a Cooke?

The Capon leeseeth not his moistnes, bicause he treadeth not the hens as the Cocke doth, and therefore is better.

CLXXII.

Why do we smell a thing lesser in the winter then in the summer?

Bicause the aire is thicker and lesse moouable.

CLXXIII.

Why doth haire burne so quickly?

Bicause it is drie and cold.

CLXXIIII.

Why is loue compared vnto a labyrinth?

Bicause the entrie and comming in is easie, and the going out impossible or very hard.

F I N I S.